KAWAI

X65-D

Owner's Manual

Thank you for your purchase of a KAWAI X65-D Personal Keyboard.

How To Use This Manual

This manual is divided into three sections: Basic Operation, Advanced Operation, and Trouble Shooting.

The Basic Operation section will help you become familiar with the basic, but extremely powerful features of the X65-D. By the time you're through with this first section, you will have a clear understanding of how to select tones and accompaniment styles, adjust tempo, use the auto-accompaniment and recorder functions, and operate Kawai's exclusive ONE FINGER AD-LIB.

The Advanced Operation section will help you explore the X65-D's more advanced features such as combining tones, adding effects, using MIDI, and programming accompaniments or ONE FINGER AD-LIB phrases.

Should you have any difficulty getting your keyboard to perform properly, turn first to the "Trouble-Shooting" section of this manual. If the solution is not found there, please refer to the Table of Contents (on the next page) and review the pertinent section of this instruction manual.

Have fun learning to play your X65-D!

■ Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a different electrical circuit from the receiver.
— Consult the dealer or an experienced radio/TV technician for help.

■ This instrument complies with the limits for class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

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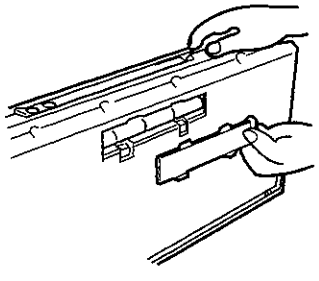
■ Before Using Your Keyboard

1. Cautions

- Do not subject the keyboard to severe shocks.
- Do not expose the keyboard to direct sunlight, or high temperatures (such as inside your car on a warm day).
- Do not use the keyboard where there is excessive moisture or dust.
- Do not disassemble or attempt to modify the keyboard.
- Should the keyboard become soiled, clean it using a soft, dry cloth. If this does not remove the stain, wet the cloth slightly before wiping. Never use alcohol or thinner to clean your keyboard.
- Do not allow foreign matter to enter the gaps between the keys or around the buttons.



2. Connecting the Power Supply

Your keyboard can use either your home AC power outlet or dry cell batteries as a power source.

■ **To insert batteries:**

1. Turn the unit over and remove the battery cover.
2. Insert six Size C dry cell batteries. Be sure they are aligned in the proper direction.
3. Replace the battery cover.

⚠ *As the batteries begin to run down, the volume of the keyboard will decrease and the sound quality will begin to change or deteriorate. The unit may begin to malfunction. At that time, you should replace all six batteries.*

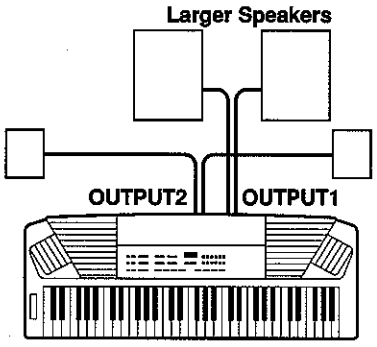
Do not mix battery types (or new batteries with old ones), as this may cause problems such as battery fluid leakage.

Remove the batteries when not using the keyboard for long periods of time.

■ **To Use An AC Power Outlet:**

Connect a PS-102 or PS-101 adaptor (available separately) to the adaptor terminal on the rear panel of the keyboard. Then, connect the adaptor to a wall socket.

⚠ *We recommend that you use a KAWAI AC adaptor (10-volt/1 Amp) with the X65-D. If you decide to use a universal adaptor from another manufacturer, please be sure of the following:*
(1) The voltage selector should be set at 10 volts.
(2) The polarity selector must be set to "negative" (−) polarity, otherwise the keyboard will not operate (or will run on batteries until the batteries are drained).
(3) The adaptor must be rated at 1 Amp (A).

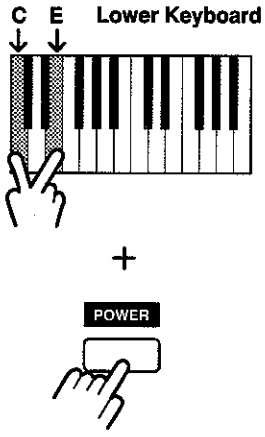


■ Where to Place Your X65-D Keyboard for Optimum Sound Quality

The X65-D's SUPER 3D Sound System consists of four multi-directional speakers. The two larger speakers are "ported" on the underside to project sound both downward and forward from the keyboard housing. TO MAXIMIZE THE SUPER 3D EFFECT AND ACHIEVE OPTIMUM OVERALL SOUND, PLACE YOUR X65-D ON A KEYBOARD STAND WHICH DOES NOT BLOCK THESE UNDERSIDE PORTS.

■ Connecting the Keyboard to an Audio Device

Your keyboard utilizes a carefully-crafted case, four multi-directional speakers and additional sound processing to create a richer, fuller sound than is possible with traditional stereo speakers. To enjoy listening to the sound of your X65-D through your amplified home stereo system or other external amplifier, purchase an adaptor plug at an electrical goods store or audio specialty shop. For normal stereo listening, use a set of cords to connect the keyboard's STEREO PHONES jack to the LINE IN or AUX IN jacks on your stereo amplifier or powered receiver. To create the full "SUPER 3D" sound effect, use one set of cords (with stereo RCA pins) to connect the keyboard's OUTPUT 1 jacks to the LINE IN or AUX IN jacks on your stereo amplifier or powered receiver and use another set of cords to connect the keyboard's OUTPUT 2 jacks to the LINE IN or AUX IN jacks on a separate amplifier or other stereo audio device.
We suggest you to connect the larger speakers to the keyboard's OUTPUT 1 jacks and connect smaller speakers to the keyboard's OUTPUT 2 jacks. Then, arrange the four speakers as shown in the illustration at left. This arrangement will help you experience the "Super 3D" effect more fully.



■ About the Keyboard's Internal Memory

The contents of the keyboard's internal memory (such as recorder data) will be kept stored for up to five years by a back-up battery built into the unit. Note that if you turn the power switch ON while holding down keys C and E at the left end of the keyboard, all of the contents of the memory will be erased and the keyboard's factory settings will be restored. This is known as the "factory reset" procedure.

⚠ *You cannot back up the internal memory once the back-up battery has run out of power. So, we recommend that you save your important data into an external sequencer (see "Using the MIDI Functions" section). For a replacement back-up battery, contact an authorized KAWAI dealer.*

■ Protective Plastic Covering On Front Panel

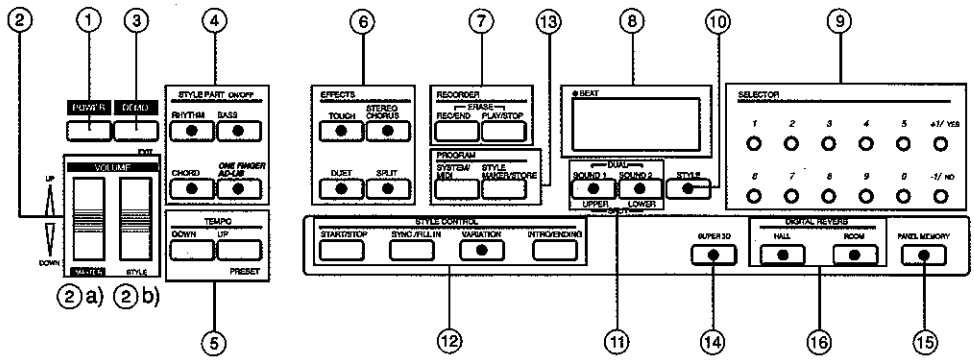
Your keyboard comes equipped with a thin plastic covering over the front panel designed to protect the panel from dust and scratches. If you want to remove this covering, carefully use a fingernail to lift up one of the corners. Then, slowly peel off the covering and discard it.

■ Trouble-Shooting On Your X65-D

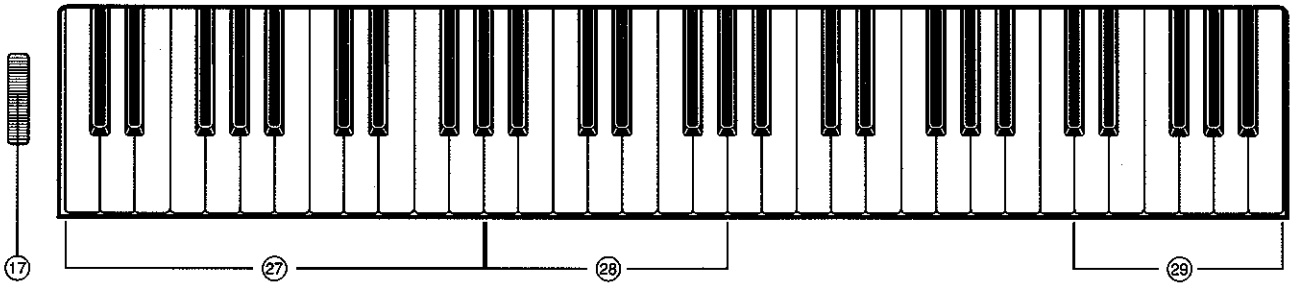
Problem:	Check the following
The keyboard makes no sound.	1) Check your power adaptor. We recommend that you use a KAWAI 10-volt adaptor. 2) If using a universal adaptor from another manufacturer: – Is the voltage at 10-volts? – Is it set to negative (−) polarity? – Is it rated above 1 Amp? 3) Have you tried six fresh batteries? 4) Are all the batteries aligned in the proper direction?

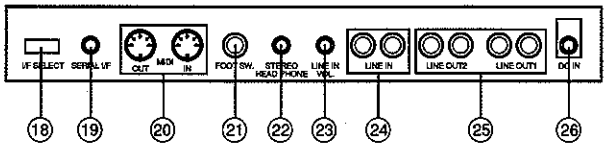
Problem:	Check the following
Some buttons do not light when you press them.	Not every button is designed to light up. Please refer to the "Overall Diagram and Explanation" on page B-4 of this manual to see which buttons are supposed to light up when you press them.
The keyboard buttons light but the keys don't play.	Check the SYSTEM/MIDI functions to make sure that the LOCAL mode is "on". If LOCAL mode gets turned "off" by mistake, the keys will not play.
The Touch Response feature does not work.	Make sure that the TOUCH RESPONSE button is lit. If not, press it.
Most of the buttons do not work.	Only the SELECTOR and SOUND 1/2 buttons will be active in GMStd mode. Select "Pro" MIDI mode to operate all buttons in normal fashion.
The front panel has a "cloudy" finish or has begun to "bubble" or "peel". This is not a defect.	There is a thin plastic film applied to the glossy panel (where the buttons are located) for protection during shipping. You can remove this film at any time. Use a fingernail to carefully lift up one of the edges, then peel off the protective film.
You are using the SELECTOR buttons to select a specific two-digit or three-digit number, but a lower number appears in the display.	You may be taking too long to enter the second or third digits. Once you enter the first digit, the keyboard waits for about one second to see if a second or third digit will follow. If the second or third digit is not entered within that one-second "waiting period", the keyboard assumes that you meant to enter a single-digit number only. Be sure to enter all two-digit and three-digit numbers in rapid succession.
When using the ONE FINGER AD-LIB feature, the sounds change by themselves.	This is normal operation. When you first activate ONE FINGER AD-LIB (OFA), specific sounds are pre-assigned to the OFA phrases. If you select a sound and then turn OFA "on", the pre-assigned sounds will appear. However, if you turn OFA on first and then select a sound, your new sound will be assigned to all the OFA phrases.
The accompaniment will not start when you press the START/STOP button.	The tempo may have been moved to SYNC mode, which deactivates the START/STOP button. To escape SYNC mode, press the TEMPO UP button until a number appears in the display. The accompaniment should now begin when you press the START/STOP button. Accompaniment cannot be started in the General MIDI Standard or Interface modes.
When you try to record a song on the X65-D's recorder, a previous song always play when you start to record.	Because the X65-D has overdubbing capability, the recorder will record over any song currently in memory. Use the ERASE procedure (press both the REC/END and PLAY/STOP buttons simultaneously twice) to clear the existing song. Then try recording again. The recorder function does not work in the GM Standard or Interface modes.
The RECORDER suddenly stops or will not record.	This usually happens when you have exceeded the RECORDER's memory capacity. Use the ERASE procedure above to clear the memory. Then, begin recording again.
The keyboard only plays drum sounds.	The DRUM SET sound (#129) has probably been selected. Use the Sound 1 and SELECTOR buttons to select a different sound (refer to the "Selecting Sounds" section of the manual).
The keyboard is not sending complete accompaniment note information via MIDI.	See the MIDI section of this manual. The Accompaniment MIDI Out function must be set to "on". Otherwise, the keyboard will only send "note" information (notes that are actually played) via MIDI.
The Variation button does not work.	The Variation Pattern does not work with Styles 99 and 100.
The keyboard MIDI transmit channel is not sent as selected.	The transmit channel will be fixed when the Accompaniment MIDI Out function is set to "on". Set the Accompaniment MIDI Out function to "off".
The DRUM SET sound on the keyboard does not change even when you change the drum part.	Drum part changes are only effective for MIDI input information on channel 10. The DRUM SET sound (No. 129) will not change.
TUNE and TRANSPOSE do not change.	TUNE and TRANSPOSE cannot be set in the GM standard mode.

■ Overall Diagram and Explanation



The buttons marked with "●" in the above illustration will light up when pressed. Buttons not marked with an "●" will not light when pressed.





■ Operation panel

① **POWER** button
The POWER button turns the keyboard's power on and off. When the power is turned on, the display window will light, showing the number 001.

② **Volume Control** buttons
a) The Master Volume buttons control overall volume of all notes played on the keyboard.
b) The Accompaniment Volume buttons control the volume of the Accompaniment Styles only.

③ **Demo** button
Pressing this button starts the built-in demo song. Press it again at any time to stop the demo song.

④ **Part** buttons
Used to turn a specific part of auto-accompaniment or ONE FINGER AD-LIB part on or off.

⑤ **TEMPO** buttons
The TEMPO buttons can be used to control changes in auto-accompaniment tempo.

⑥ **EFFECTS** buttons
These buttons allow you to add variety to the keyboard's 129 sounds by adding effects such as Stereo Chorus, and Duet Harmony.
The TOUCH RESPONSE button allows you to turn the touch response feature on or off.
You can assign different sounds to the upper and lower settings of the keyboard when you use the SPLIT function.

⑦ **Recorder** Section
These buttons allow you to record the songs you write or perform on the keyboard.

⑧ **Display**
The display window shows which sound or style is currently selected. The window is also used to display a wide variety of other information which will be described later in this manual.

⑨ **SELECTOR** buttons
a) Numeric buttons (Ten keys)
Used to enter the numbers that appear in the LED display. To enter a number from 1 to 9, just press the number you desire. The keyboard will wait for about one second to see if you press another digit. After this brief pause, the display will show the number you selected (001 to 009). To enter a number between 1 and 9 without the one-second pause, enter two "zeros" before the number. For example, you would rapidly press "0-0-6" to select sound number "6" without a pause.

To enter a two- or three-digit number, press all the digits in rapid succession. For example, to enter sound number 025, press 2 followed quickly by 5. After a one-second pause, "025" will appear in the display. To avoid the pause, rapidly enter "0-2-5". The display will immediately read "025".
If you wait too long to enter the last digit ("5"), the keyboard will think you meant to select "2" and then changed your mind to select "5". The display will end up showing "005" instead of "025".
BE SURE TO ENTER ALL THE DIGITS OF THE DESIRED NUMBER IN RAPID SUCCESSION.

b) "−1/+1" buttons
These buttons are used to increase or decrease the numbers in the display window by a value of 1.

⑩ **Accomp. Style** button
This button is used when selecting from among the 100 Accompaniment Styles stored in the keyboard's memory.

⑪ **SOUND 1** and **SOUND 2** buttons
These buttons are used to select from among the 129 sounds available in the SOUND LIST.
These buttons are also used to select sounds when using the SPLIT function.

⑫ **Accompaniment Control** button
These buttons allow you to control the "INTROs" (Introductions) that can be used to start a song, "FILL-INs" to add variety during a song, "ENDINGs" which finish a song, and "BASIC Patterns" which are the foundation of any song that uses auto-accompaniment. The "SYNC./FILL-IN" button lets you start your song at the exact moment you press a key in the Lower Keyboard. You can also use the VARIATION button to select the "variation" version for each Style.

⑬ **Program** buttons
a) STYLE MAKER button
This button allows you to create your own accompaniment styles and ONE FINGER AD-LIB phrases with the Style Maker feature.
b) System/MIDI button

⑭ **SUPER 3D** button
This button allows you to turn SUPER 3D system "on" or "off".

⑮ **PANEL MEMORY button**
The current panel settings are stored in memory when you press this button. Up to four settings can be stored in memory.

⑯ **Digital Reverb** Section
These buttons let you select either of the the two reverb settings (HALL or ROOM). The Digital Reverb effect can be turned "off" by pressing the Reverb button which is currently lit. When neither Reverb button is lit, the Reverb effect is turned off. To restore Digital Reverb, press either Reverb button so that one lights up.

⑰ **Pitch Bend Wheel**
Rotating this wheel up or down allows you to change the pitch of a sound.

■ Rear Panel

⑱ **Serial Interface Setting Button**
This switch is used to select the type of computer which will be used with the X65-D's Serial Interface.

⑲ **Serial Interface**
This interface port allows you to connect the X65-D directly to the serial port of a computer.

⑳ **MIDI IN/OUT** Jacks
These jacks are used to connect the keyboard to other MIDI instruments and equipment.

㉑ **PEDAL** Jack
This jack allows you to connect an optional footswitch (model F-1, available separately) to the keyboard. When the footswitch is depressed, notes played on the keyboard will be heard continuously for as long as the footswitch is held down (or until the natural decay of a sound reduces it to zero volume). It operates like a sustain pedal on a piano. (The pedal has no effect on auto-accompaniment performance.)
This jack can also be programmed to let an optional footswitch (model F-1, available separately) function in different ways. Refer to the "Using the SYSTEM Functions" for details.

㉒ **STEREO PHONES** Jack
When stereo headphones are connected to this jack, the sound from the speakers is cut off. This allows you to play the keyboard at night and at other times when you might be concerned about disturbing others.

㉓ **Input Volume** Knob
This knob adjusts the input volume level of any external device connected to the X65-D's input jacks.

㉔ **Input** Jacks
These jacks allow you to connect any external audio device or electronic musical instrument to the X65-D. The sound of the external device will be heard through the X65-D's speakers.

㉕ **OUTPUT 1/OUTPUT 2** Jacks
These jacks are used to send the keyboard's sound through an external amplifier or amplified home stereo system.

㉖ **DC IN** Jack
This jack is used to connect a Power Adaptor (Kawai PS-102 or PS-101) available separately.

See page B-2 for special instructions if you are using a universal AC adaptor or other brand of adaptor.

■ Keys

㉗ **Lower Keyboard (C1 – G#2)**
These are used to trigger chord forms when the auto-accompaniment function is selected.

㉘ **ONE FINGER AD-LIB Keys (A2 – G#3)**
These keys are used to play ONE FINGER AD-LIB phrases when the ONE FINGER AD-LIB function is selected.

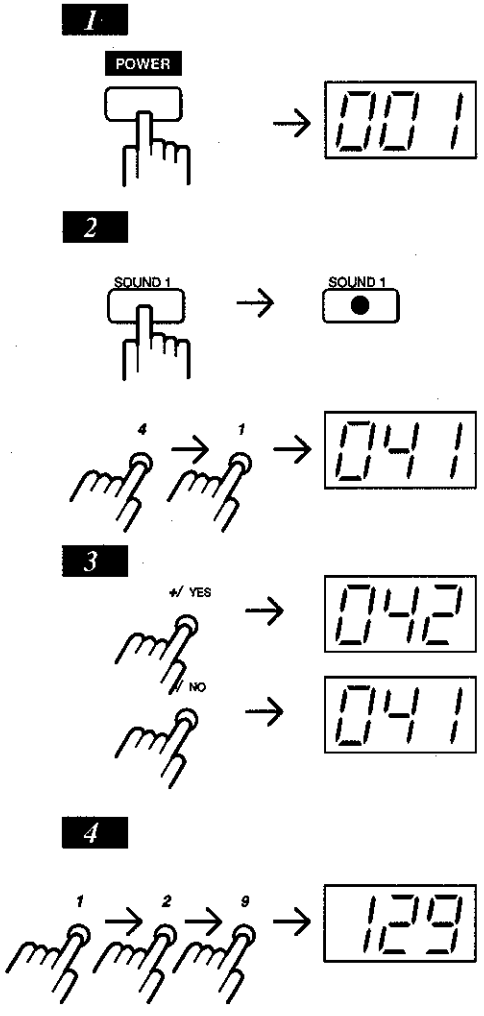
㉙ **User Program Keys (C#5 – C6)**
Used for programming auto-accompaniments (with Style Maker) and ONE FINGER AD-LIB phrases.

Of course, the keys in the special keyboard sections named above also function as a normal keyboard when all automatic settings are off.

Throughout this manual, the keys will be referred to in the following manner:
C1 stands for "the first C" on the keyboard, counting from the left.
B2 stands for "the second B" on the keyboard from the left.
The total range of your keyboard is C1 to C6.

■ Getting Started On Your Keyboard:

◆ Selecting Sounds



This section will show you how to select and play any of the 129 sounds listed in the SOUND LIST on the keyboard's front panel.

1. First, press the **POWER** button to turn the keyboard "on". Several buttons will light (like the SOUND 1 button). The display should also be lit, showing the number 001.
   Press one of the keys on the keyboard. You should hear the sound which is numbered 001 (GRAND PIANO). Your X65-D features Touch Response, which allows you to control the volume of each note by playing hard or soft.
   Try playing a few notes with varying force. You'll notice that the harder you strike the keys, the louder they will sound.
   The volume of the entire keyboard can be controlled with the MASTER VOLUME buttons. These buttons will not light.
2. Check to be sure that the **SOUND 1** button is lit (if not, press it now). Next, quickly press "**4**" and then "**1**" with the SELECTOR buttons to select sound number 041 (VIOLIN). The number in the display should change to read "041" after about one second.

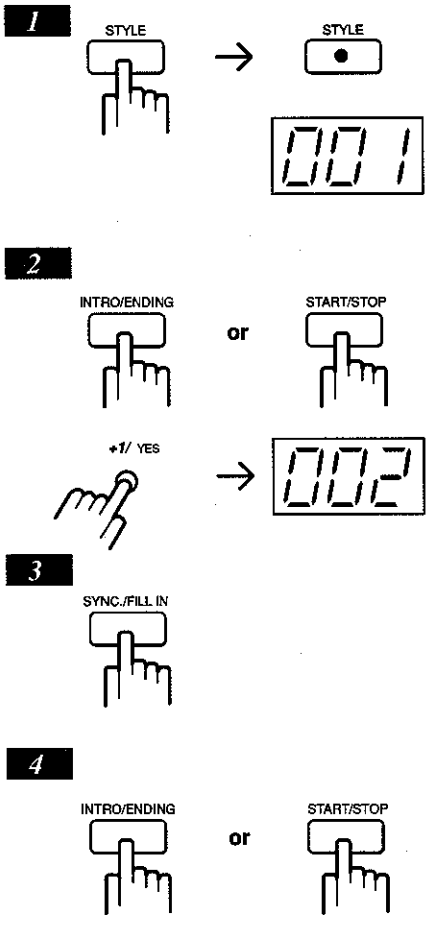
   ⚠ *When you use the SELECTOR buttons to select a two-digit or three-digit number, enter all the numbers in rapid succession. A lower number will appear in the display if you take too long to enter the second or third digits. The SELECTOR buttons will not light when you press them.*

3. You can use the SELECTOR section to choose any of the keyboard's 129 sounds quickly and easily. The **+1** button adds "one" to the number in the display, while the **−1** button subtracts "one" from the displayed number. The number shown in the display is the number of the sound currently selected.
   Look at the SELECTOR section and find the button marked **+1**. When you press it, the number shown in the display should change to 042. When you press one of the keys on the keyboard, you will hear sound number 042 (VIOLA).
   Pressing the **−1** button in the SELECTOR section will bring you back to sound number 41 (VIOLIN).
4. Press "**1-2-9**" in rapid succesion to select sound number 129 "DRUM SET". When you press one of the keys on the keyboard, you will hear the sound of the instrument pictured above that key. Refer to page Ap-3 for the chart of drum assignments.

   Note: When you activate the auto-accompaniment feature, the pitch of the "normal" keyboard section on the right will drop by one octave for certain sounds (bass, guitar, etc). This octave shift helps keep these sounds closer to their normal sound range, even though you've playing upper-range notes on the keyboard.

■ Getting Started with Accompaniment Styles

◆ Selecting Accompaniment Styles



This section will show you how to select and play any of the 100 Accompaniment Styles listed in the STYLE LIST on the keyboard's front panel.

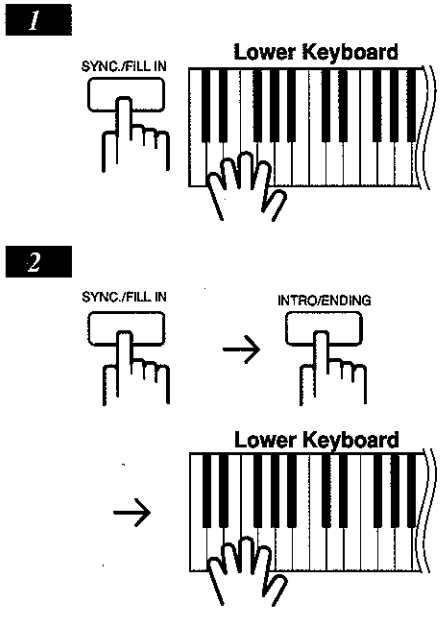
1. First, press the **ACCOMP. STYLE** button. The button will light and the display will change to read 001.
2. If you press the **INTRO/ENDING** button at this point, you will hear an introduction, followed by the BASIC Pattern for Style number 001 (JAZZ FUNK 1).

   To start the Style without the Intro, press the START/STOP button. Now, find the SELECTOR buttons and press the **+1** button. The display will change to read 002 and the Style will change to number 002 (JAZZ FUNK 2). You may use the SELECTOR buttons in this way to select any Style you desire. The number in the display will change to indicate the number of the Style currently selected.

   ⚠ *Not every button is designed to light up when pressed. Refer to the "Overall Diagram and Explanation" on page B-4 of this manual to see which buttons will light and which will not.*

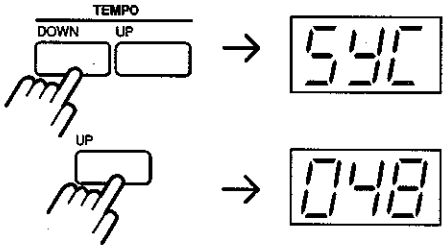
3. Try pressing the "**SYNC./FILL-IN**" button while the auto-accompaniment is playing. The keyboard will play a FILL-IN pattern suited to the Style currently selected. The FILL-IN feature can help to add variety within a song.
4. Next, press the **INTRO/ENDING** button. An "Ending" which matches the currently selected Style will play to finish the song. If you want the Style to end abruptly without the ENDING, simply press the **START/STOP** button.

◆ Using the SYNC Feature



1. If you press the **SYNC./FILL-IN** button while the accompaniment is off, the button functions as a "**SYNC.**" button only. When the **SYNC./FILL-IN** button is pressed, the Style will begin to play the moment you press a key on the Lower Keyboard. The start of the Style will "synchronize" with your touch of the keyboard (thus, the abbreviation "SYNC").
2. If you want to start the accompaniment with your touch of the keyboard (as described above), but would rather have the accompaniment begin with an appropriate introduction, press the **SYNC./FILL-IN** button and then the **INTRO/ENDING** button. When you press a key on the Lower Keyboard, the INTRO will play first, followed by the BASIC Pattern.

◆ Changing Accompaniment Tempo



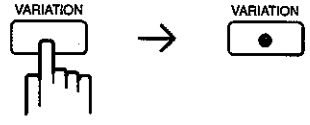
You can use the **TEMPO** buttons (which do not light) to change the tempo of any accompaniment. The **UP** button causes the tempo to increase. The **DOWN** button causes the tempo to decrease. The small lamp at the top left of the display (labelled BEAT) will blink in time with the current tempo. When you press either of the **TEMPO** buttons, the display will briefly show the current tempo.

If you continue to press the Tempo **DOWN** button to minimum tempo, the display will change to read SYC which is an abbreviation for "SYNC" or "synchronized mode". This setting is a MIDI-related function which is discussed in the Advanced Operation section of this manual. The **START/STOP** button will not operate when this mode is activated. To escape SYNC mode, press the **TEMPO UP** button until a number appears in the display.

Pressing the **TEMPO UP** button within five seconds after selecting a new Style will change the tempo to a factory preset rate that suits the new Style.

◆ Using the VARIATION button

1



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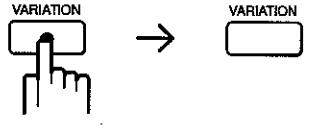


The "Variation" feature provides an easy way to add variety and excitement to your performances. Here's how it works.

1. Press the **VARIATION** button while the auto-accompaniment is playing. The **VARIATION** button will light up and a louder "FILL-IN" Pattern (which we will call FILL-IN 2) will play to announce the "variation" style. The FILL-IN 2 is followed immediately by the more complex and exciting Variation Pattern.
2. Press the **SYNC./FILL-IN** button while **VARIATION** button is lit. You will hear the louder FILL-IN 2 play, followed by the Variation Pattern.

> ⚠ *There are two types of FILL-INs for each Style on the X65-D. If you press the SYNC./FILL-IN button while the VARIATION button is not lit (which means the BASIC Pattern is currently selected), you will hear the softer FILL-IN 1.*

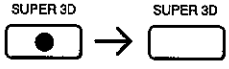
3. Press the **VARIATION** button again. The button light will go off and the softer FILL-IN 1 will play, followed by the original BASIC Pattern.

> ⚠ *The VARIATION button does not work if you select one of the USER Accompaniment Styles, which are numbered 099 and 100 in the STYLE LIST.*

■ Using the "SUPER 3D" Section

1

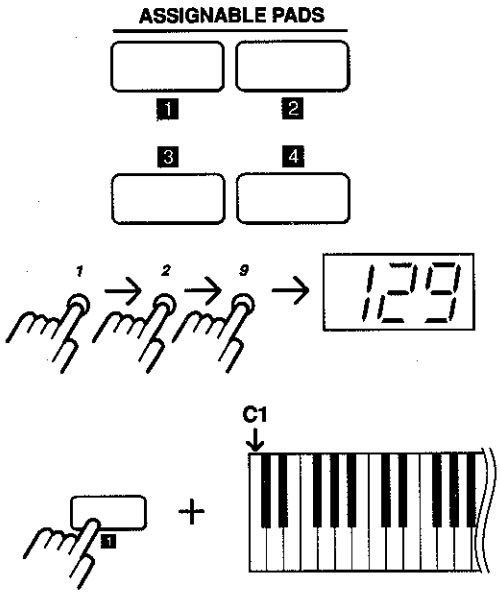
2



"SUPER 3D" is the Kawai's exclusive sound enhancement system which brings a new dimension of sound to the listener's ears — the third sonic dimension of "depth". The X65-D keyboard utilizes a carefully-crafted case, four multidirectional speakers and additional sound processing to create a richer, fuller sound than is possible with traditional stereo speakers.

1. Select Style number "001" using the **ACCOMP. STYLE** button and the **SELECTOR** buttons. Now, **look at** the SUPER 3D button on the front panel of the keyboard.
   The SUPER 3D button should be lit, indicating that SUPER 3D is currently active.
   Press the **START/STOP** button to begin the auto-accompaniment. You will be able to experience the music richness of SUPER 3D.
2. You can cancel the SUPER 3D system by pressing the **SUPER 3D** button so that its lamp goes off.

■ Using the Drum Pads

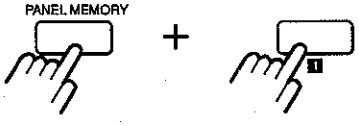


There are four drum pads on the X65-D. When you try these pads, you will hear four drum sounds that have already been preset. It is also possible to assign other drum sounds to these pads. Use the procedure below to assign you favorite drum sound to each of the four pads:

> ⚠ *See that Panel Memory Button ⑮ is not lit. If it is lit, then these four drum pads will work as Panel Memory Selector Buttons. (Refer to the following section "Using Panel Memory")*

1. First, make certain that the **PANEL MEMORY** button is not lit. If it is lit, the four drum pads will operate as PANEL MEMORY selector buttons. (Refer to the follwing section "Using PANEL MEMORY").
2. Select Sound 129 to assign Drum Set to the keys. This will allow you to play drum sounds on the keyboard. You can assign a drum sound to a pad by holding the pad down while you press a drum sound key.
3. Let's assign a bass drum sound to the first drum pad. While holding down the first drum pad, press the key C1. Now you should hear a bass drum when you press the first drum pad.

■ Using the Panel Memory



With the X65-D, up to four panel settings can be stored in memory. When the **PANEL MEMORY** button is lit, you can use the four pads on the right side to store and recall panel settings. These pads are normally used as drum pads, but when the **PANEL MEMORY** button is lit, they are used as PANEL MEMORY selector buttons.

1. First, adjust the panel to the setting you want stored in memory. For this procedure, the **PANEL MEMORY** button should not be lit.
2. Next, hold down the **PANEL MEMORY** button while you press the pad on which you want to save your setting. For this example, press Pad 1.
3. Pad 1 will now contain the panel setting that you set up earlier. Try assigning panel settings to Pads 2, 3 and 4.

> ⚠ *If the above operation is done when the* **PANEL MEMORY** button is lit, no panel setting will be stored. Be sure that the **PANEL MEMORY** button light is off before you try to store a panel setting.

Recalling Stored Settings

You can recall a panel setting that you have stored by pressing the **PANEL MEMORY** button (so that it lights) and pressing a pad on which you have stored a setting.

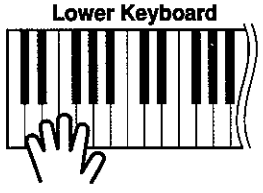
■ Using Auto-Accompaniment

The X65-D's auto-accompaniment (short for "automatic accompaniment") section is one of the most powerful found on any portable keyboard. It has the capability of working in three different "modes". In this Basic Operation section of the manual, however, we will deal only with the first mode called "AUTO 1". In AUTO 1 mode, you can control the chord and bass parts with your left hand while playing the melody with your right hand. Here's how AUTO 1 works:

The AUTO 1 auto-accompaniment mode allows you to create a realistic "full band" performance by simply pressing and holding left hand chords as you play the melody. The 21 keys on the left side of the keyboard (which we call the Lower Keyboard) are used to play the chords which control the auto-accompaniment.

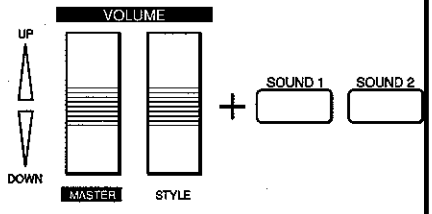
1

2



1. Select an Accompaniment Style (which we'll refer to as just "Style") using the **ACCOMP. STYLE** button and the **SELECTOR** buttons. Then, start the Style by pressing the **START/STOP** button.
2. Now press one or more of the keys on the Lower Keyboard. The auto-accompaniment chords will change as you press different keys. Your keyboard recognizes a wide variety of chords. See Page Ap-1 for a chart of these chords in the key of C and some valuable hints for beginners.

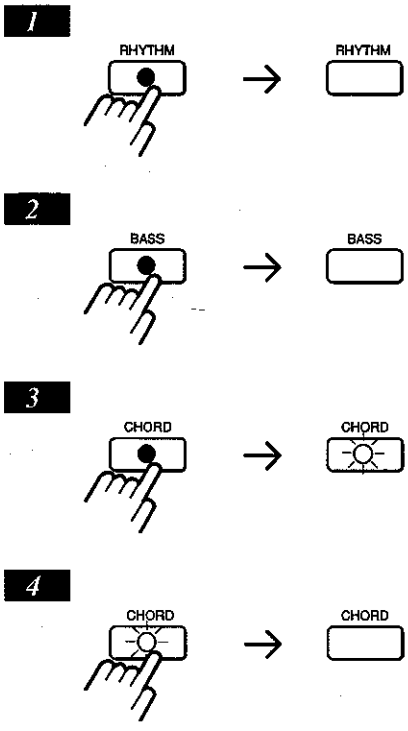
■ The Mixer Section



The **MASTER VOLUME** buttons (which do not light) control overall volume of all notes played on the keyboard. The volume of auto-accompaniment can be adjusted using the **ACCOMP. VOLUME** buttons (which do not light). The current volume for a specific part will appear briefly in the display each time a VOLUME button is pressed.

With the X Series keyboards, you can also adjust the individual volume of the instruments assigned the **SOUND 1** and **SOUND 2** buttons. For example, if PIANO is assigned to SOUND 1, you can increase its volume individually by holding down the **SOUND 1** button while you raise the volume with the **MASTER VOLUME** buttons. In the same way, you can increase ro decrease SOUND 2 volume individually by holding down the **SOUND 2** button while using the **MASTER VOLUME** buttons to adjust the level.

◆ Muting a Part



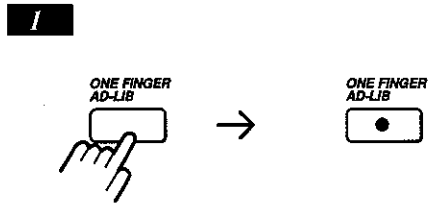
You can turn any of the auto-accompaniment elements (rhythm, bass, and chord parts) on or off using the following procedure:

1. Press the **START/STOP** button to begin an auto-accompaniment. Then, press the **RHYTHM** button (in the **PART** section). The RHYTHM button light will go off and the volume of the "rhythm" part will be turned off. This procedure is called "muting" a part. Next, press the **RHYTHM** button again. The RHYTHM button will light and the volume of the Rhythm (drum) part will be restored.
2. Press the **BASS** button in the PART section. The BASS button light will go off and the Bass part volume will be turned off. When you press the **BASS** button again, the BASS button will light and the Bass part will immediately return to its original volume level.
3. SINGLE FINGER CHORD MODE.
   The CHORD button operates a bit differently.
   Press the **CHORD** button once. This time the CHORD button will flash, indicating that you are in "Single Finger Chord" mode. This mode lets you play a complete chord by pressing one note in the Lower Keyboard. To try "Single Finger Chord" mode, use the **START/STOP** button to stop the auto-accompaniment. Then, hold down one note in the Lower Keyboard. You should hear a complete chord play for as long as you hold the note down.

   Note: There are actually three sounds which make up the "chord" part of an Accompaniment Style. In "Single Finger Chord" mode, only one of these sounds is used to play the chord.

4. Press the **START/STOP** button to resume the auto-accompaniment. Now, press the **CHORD** button again. The CHORD button light will go off, and all the CHORD parts will be muted (off).
5. Press the **CHORD** button one more time. The CHORD button will light up and all the CHORD parts will return to original volume.
6. Here is a summary of CHORD button operation for the X55-D:
   LIT: All chords are heard.
   FLASHING: Single Finger Chord mode. You can play a chord with one finger in the Lower Keyboard when the auto-accompaniment is "off".
   NOT LIT: All chord parts are muted.

■ Using ONE FINGER AD-LIB To Play Like a "Pro"



ONE FINGER AD-LIB is an exclusive Kawai feature which allows anyone (at any level of musical ability) to sound like a "pro". With the touch of a finger, you can play hundreds of impressive ad-lib melodies with full auto-accompaniment and chord progressions. ONE FINGER AD-LIB will make your keyboard immediately fun and "playable" for every member of your family (even the non-players)!

The ONE FINGER AD-LIB phrases are determined by the Accompaniment Style (or "Style") you select. For example, there are "funky" ad-lib phrases for Style number 007 (DISCO FUNK 1) and some exciting rock'n roll phrases for Style number 045 (R&R1).

How does ONE FINGER AD-LIB work?

1. Use the **ACCOMP. STYLE** button and the **SELECTOR** buttons to select a Style. Next, press the **ONE FINGER AD-LIB** button. The ONE FINGER AD-LIB button will light up.
2. Now, press and hold down one of the keys in the ONE FINGER AD-LIB section of the keyboard (shown in the drawing at left). By holding down a single key, you can play an entire ad-lib phrase! Try other ONE FINGER AD-LIB keys. Note that each key plays a different phrase and that some keys use different sounds than other keys.
3. **Adding Auto-Accompaniment**
   Press the **START/STOP** button. The Style you selected will begin to play. Listen closely! Notice that the auto-accompaniment chords are changing automatically. The keyboard has been designed so that each Style is accompanied by an authentic-sounding progression of chords that plays automatically.
4. Now, hold down one of the keys in the ONE FINGER AD-LIB section of keyboard (try to press the key on one of the main beats of the accompaniment).
   The ad-lib phrase will play. If you continue to hold the AD-LIB key down, you'll notice that the phrase changes automatically with the chord progression!
5. To change the preset chord progression, play any chord on the Lower Keyboard.
   This will override the preset progression.
   Then, the ONE FINGER AD-LIB phrases will change to match your own chords.

⚠ *IMPORTANT NOTE: When you turn ONE FINGER AD-LIB "on", specific sounds will automatically appear on the ONE FINGER AD-LIB phrases. These are preassigned at the factory. To select your own sounds, turn ONE FINGER AD-LIB "on" first and then select a sound. Your new sound will be assigned to all twelve ONE FINGER AD-LIB phrases.*

◆ A Note About the ONE FINGER AD-LIB Chord Progressions

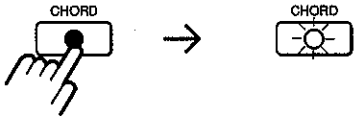
When you start the auto-accompaniment with ONE FINGER AD-LIB turned "on", the chord progression that plays is automatically in the key of C. For example, the progression for Style number 001 (JAZZ FUNK 1) is as shown at left.

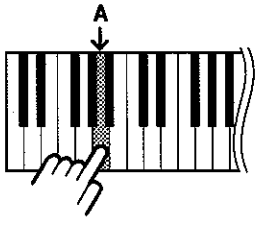
C	C	F7	F7 :‖

⚠ *When the chord is selected with the lower keyboard, chord progression stops and AUTO-ACCOMPANIMENT is started in the selected chord.*

1

3





4

A	A	D7	D7

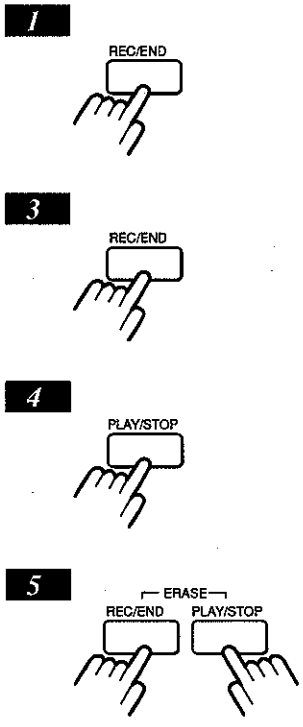
Changing Keys with ONE FINGER AD-LIB

What if you wanted the chord progression for JAZZ FUNK 1 to be in the key of "A"? You can change it! Follow this procedure:

1. Be sure that the ONE FINGER AD-LIB button is lit.
2. Make sure the auto-accompaniment is stopped (use the START/STOP button if necessary.
3. Press the **CHORD** button until it flashes.
   Then play an "**A**" in the Lower Keyboard as shown in illustration at left.
4. Then, press the **START/STOP** button to start the auto-accompaniment. The chord progression will now be in the key of "A" as shown at left.

To play in the key of "G", just repeat the four steps above playing a "G" key instead of the "A" key in Step 3.

■ Using The Real-Time RECORDER



This section will show you how to record the songs you perform using the keyboard's RECORDER feature. Here are the steps:

1. Press the **REC/END** button (which will not light). You will hear the sound of the metronome.
2. Start playing. Everything you play, including ONE FINGER AD-LIB phrases and changes in Sounds or Styles, will be recorded just as you played them. That's what "Real-Time" means. What you play is what you get.
3. When you are done with your song, press the **REC/END** button once more. The recording process will end.
4. Now, play the song back. Press the **PLAY/STOP** button (which will not light). The song you just recorded will begin to play. To stop the song without listening through to the end, press the **PLAY/STOP** button once more.
5. To record a different song, you must first erase the song currently in memory. To erase the current song, press the REC/END button while holding down the PLAY/STOP button. The song will be erased instantly.

⚠ *Tempo information will not be recorded by the RECORDER. This allows you to record songs at a slow tempo and play them back at a faster tempo.*

⚠ *Once the memory capacity of the recorder is reached, the recorder will automatically stop recording.*

◆ Using The Overdubbing Capability

"Overdubbing" is a term used in professional recording studios. It means "recording one track over another" to achieve a multi-track recording. The X65-D's RECORDER gives you this capability. Note that ONE FINGER AD-LIB phrases, auto-accompaniment playing, dual sounds, and duet harmony (described later) should be recorded on the first track you record. You cannot use these features on subsequent overdub tracks.

6. To overdub, repeat the following step up to three times. Each time you repeat this step, you're recording another "track". Fine 4-track performance (the 1st track and three other over dubbing tracks) is possible if you select a different sound for each track.

   Procedure:
   Press the REC/END button. Then, press the PLAY/STOP button. Any tracks you recorded earlier will begin to play back. Start playing your new track in time with the previous tracks. When you are done recording the new track, press the REC/END button.
   Repeat this procedure to record another overdub track. When the recorder will no longer record another track, it has reached overdubbing capacity.

7. While overdubbing, you may find it necessary to erase only the last track recorded (but keep previous tracks). To do this, press the REC/END and PLAY/STOP buttons simultaneously as above. Then you can continue overdubbing by repeating the above step.

   ⚠ *When the maximum number of simultaneous sounds has been reached at a given moment, the recorder will not receive additional notes.*

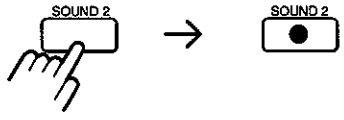
8. To erase the entire song, press the REC/END button twice while holding down the PLAY/STOP button.

■ Congratulations!

You've finished learning the Basic Operations of your keyboard.
We trust that this first section has given you a good basic knowledge of the X65-D's powerful features. But you've only just begun to explore the full capability of your keyboard!
The Advanced Operation section will show you how much more can be done with this powerful instrument.

■ Advanced Use of Sounds:
◆ Combining Two Sounds

2



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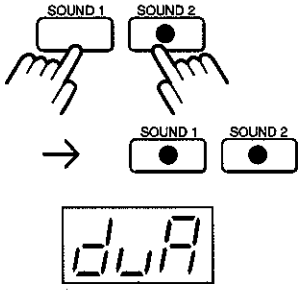
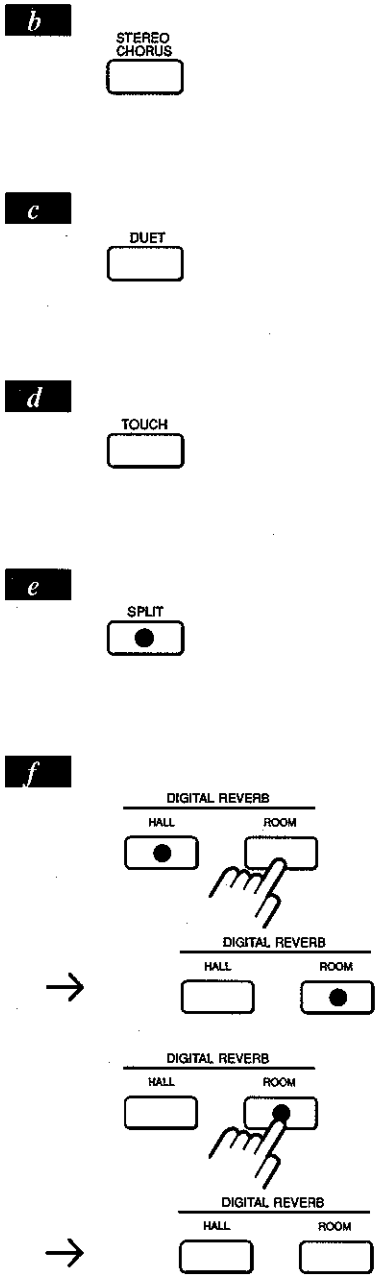


As a first step in this Advanced Operation section, try combining two of the sounds listed in the keyboard's SOUND LIST for a rich DUAL sound effect.

1. First, select any sound using the SELECTOR buttons. For this example, choose sound number 001 (GRAND PIANO).
2. Next, press the **SOUND 2** button. The button will light up. Now, select sound number 054 (VOICE OOHS) for our example.
3. Press both the **SOUND 1** and **SOUND 2** buttons simultaneously. Both buttons will light up and the display should change to read "dUA", which is short for "Dual". When you play the keyboard, you will hear the combination of sounds 001 and 054, GRAND PIANO and VOICE OOHS.

◆ Adding Effects



Your keyboard has a variety of effects which can add realism or excitement to your selected sound.

a) **PITCH BEND Wheel:**
Pitch bend is an effect which bends the pitch of a sound smoothly up or down.
It is useful for copying the sound of a guitar being played with a "choking" technique. Try rotating the Pitch Bend Wheel while holding down one of keys on the keyboard. The pitch should bend smoothly up when you rotate the pitch wheel away from you or down when you rotate the wheel toward you.

b) **STEREO CHORUS:**
Pressing the **STEREO CHORUS** button adds a deep stereo richness to the currently selected sound. Pressing the button a second time cancels the effect.

c) **DUET HARMONY:**
When the **DUET** button is pressed, the keyboard will add a harmonizing note to each melody note that is played on the keyboard, so you can enjoy a duet performance while playing only one melody note at a time. This function is most effective when used together with the auto-accompaniment function.
Pressing the button a second time cancels the DUET effect.

d) **TOUCH RESPONSE:**
When you press the **TOUCH RESPONSE** button, the light will go off and the "Touch Response" feature will be deactivated. Press the **TOUCH RESPONSE** button again and it will light up, indicating that Touch Response feature is restored.

e) **SPLIT:**
You can enjoy different sounds with the upper and lower keys when you use the SPLIT function.
1. Check to see that the upper button (SOUND 1 button) is lit. Choose the upper key sound with the SELECTOR as when normally choosing sound.
2. Next, select lower key sound. Press the lower button (SOUND 2 button) and choose the sound in the same way.
3. Press the **SPLIT** button. Consequently, the different sounds chosen for the lower keys and upper keys will be heard when the lower and upper keys are played respectively.

You can enjoy two sounds at the same time when you use the SPLIT function.

f) **DIGITAL REVERB:**
The X65-D lets you select between two types of reverb (echo). When the power of the X65-D is first turned on, the HALL button will be lit to indicate that the deeper HALL reverb effect is selected. When you press the ROOM button, the button will light and the more intimate "ROOM" reverb will be selected.
To turn the reverb effect "off", press whichever reverb button is lit (either HALL or ROOM). This will leave both reverb button lights off and the reverb effect will be cancelled.

⚠ *All of the above effects (except for digital reverb) can be applied only to SOUND 1 or SOUND 2, not to the auto-accompaniment parts (RHYTHM, BASS, or CHORD).*

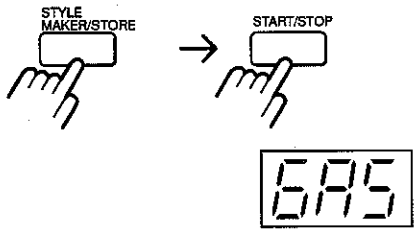
⚠ *When you choose the DUAL or STEREO CHORUS effects, the number of notes that can be heard at the same time (polyphony) will be reduced.*

⚠ *The DUET effect cannot be activated when Auto 2 or Auto 3 is selected. (Refer to page A-3 for details).*

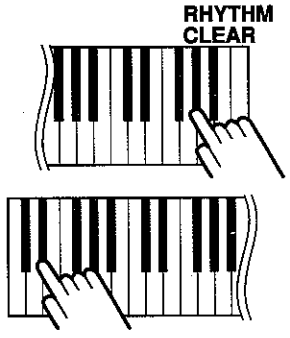
■ Style Maker: Creating Accompaniment Styles

◆ Creating BASIC Patterns

1



2-a



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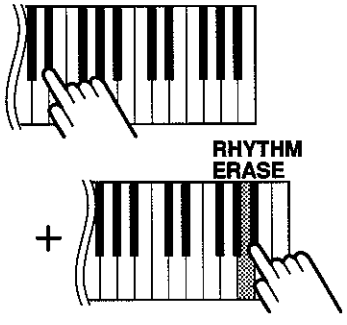
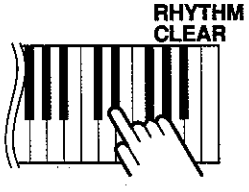


2-c



Have you ever wished you could take your own musical ideas and put together a dynamite auto-accompaniment style of your own? Now you can! Using the Style Maker feature, you can create your own Styles (including INTRO, FILL-IN, ENDING, and BASIC Patterns). This is an extremely powerful feature that offers you tremendous creative freedom!

1. Use the **SELECTOR** buttons to select a style. For this example, try the Style No. 033 (POP ROCK 1).
2. **First select the BASIC Pattern.**
   With the accompaniment turned "off", press the **STYLE MAKER** button (which does not light). Then press the **START/STOP** button. The display will change to read "bAS", which is short for "Basic." This indicates that the BASIC Pattern has been selected.

   Now change the Rhythm (drum) part.
   Find the STYLE MAKER section at the right end of the keyboard which is identified by the heading STYLE MAKER above the keys. This section contains the "User Program" keys for changing accompaniment styles.

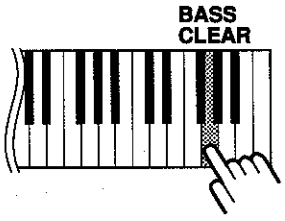
   Notice that there are two RHYTHM CLEAR keys in the STYLE MAKER section. That is because the Rhythm part is made up of two elements – the "Group A" Rhythm part and the "Group B" Rhythm part. The Group A Rhythm part is heard through the two smaller recessed speakers on the X65-D. The Group B Rhythm part is heard through the two larger speakers.

   (a) **Changing the Group B Rhythm Part**
   Press the G#5 key (labelled "Rhythm Clear") twice. You'll hear the metronome begin to play. The metronome is on if you can hear a high "wood block" sound on the first beat of each measure. The display will change to show the number of the POP ROCK Style (that is, number 033). Try adding the CLAP sound by pressing the D#1 key (which controls the CLAP sound) wherever it seems appropriate. Add other drum sounds to suit your musical taste.

   (b) If you make a mistake (for example, you put the claps in the wrong place), use the "Rhythm Erase" key (A5) to remove the mistake. Hold down the Rhythm Erase key (A5) while you press the "CLAP" key (D#1). All CLAP sounds will be instantly erased.

   (c) **Changing the Group A Rhythm Part**
   Press the D#5 key twice. The entire Group A rhythm part will be erased. Now, use the drum keys to rebuild the rhythm part. If you make a mistake, use the Rhythm Erase key (A5) to erase a particular sound as before.

⚠ *Three CLEAR keys at the left side of the STYLE MAKER section (C#5 to D#5) are used to create the Group A parts. Five CLEAR keys from E5 to G#5 are used to create te Group B parts.*



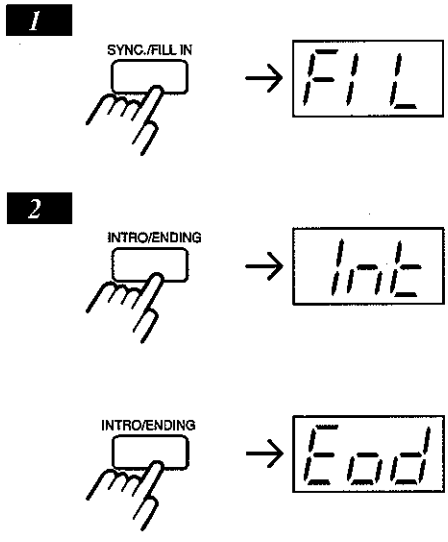
2. Changing the Bass part.
   Now, move on to the bass part. Press the "BASS CLEAR" key (G5) twice. The bass part should disappear and the display will change to show the number 039. This indicates that sound 039 (SYNTH BASS 1) is currently being used for the bass part in this Style.
   Use the notes from C1 to C5 to create a new bass part. To use a sound other than SYNTH BASS 1 for the bass part, select a sound you prefer using the SELECTOR buttons. The new sound number will appear in the display.
3. Last, let's change the Chord part.
   The chord part consists of five elements (Chords 1/2 of Group A and Chords 1/2/3 of Group B). Press the CHORD 3 CLEAR key twice. The number 058 should appear in the display. This indicates that sound number 058 is being used for the Group B Chord 3 part. Use the keys from C1 to C5 to add some notes to this part.
   To use a sound other than Sound 058, select the sound you want using the SELECTOR buttons.

When you press the **STYLE MAKER "CLEAR"** key once, that part will be selected and it will be possible to store a new Style. Pressing the STYLE MAKER "CLEAR" keys twice erases all notes from that part, allowing you to rebuild it from scratch. The three CLEAR keys at the left side of the STYLE MAKER section (C#5 to D#5) are used to create the Group A parts. the five CLEAR keys from E5 to G#5 are used to create the Group B parts. Use the procedure described above to create any of the other parts of an accompaniment. For example, press the Group A "Chord 1 Clear" key twice. The entire Group A Chord 1 part will be erased. Then, create a new Group A Chord 1 part to suit your musical taste. Use the C, E and G keys from C1 to C5 to create Chords 1/2 parts.

⚠ *Both Group A and B parts will be erased when Chord 1 and 2 parts are cleared.*

So far, we have changed each of the elements (rhythm, bass, chord) of the POP ROCK Basic Pattern. But we have not yet stored the revised Style in the X65-D User Memory. Before describing the "storing" procedure, let's change the FILL-IN, ENDING and INTRO Patterns as well.

■ Creating FILL-IN, ENDING and INTRO Patterns:



FILL-IN, ENDING and INTRO Patterns can also be changed using the same procedure that you used to change the Basic Pattern in the previous pages.

1. Try changing the FILL-IN Pattern:
   With Style 033 (POP ROCK) still selected, press the **SYNC/FILL-IN** button.
   The display will change to read FIL and you should hear the POP ROCK FILL-IN Pattern. Change this FILL-IN Pattern to suit your taste by using the same procedure that you used to change the Basic Pattern.
2. Now, change the INTRO and ENDING Patterns:
   When you press the **INTRO/ENDING** button, the display will change to read "Int" and you will hear the POP ROCK "INTRO" Pattern. Press the **INTRO/ENDING** button once more and you will hear the ENDING Patterns. The INTRO/ENDING button lets you switch back and forth between INTRO and ENDING. Now, edit these patterns using the same procedure described earlier.

⚠ *When creating difficult patterns, try slowing down the tempo for input. Then, speed the tempo up again for playback or performance.*

The same Bass and Chord sounds will be used on all four pattern types (BASIC, INTRO, FILL-IN, and ENDING) for each Style. The last sounds you choose for the Bass and Chord parts are the ones that will be memorized when you store the style. For example, if you chose CLAVI for the bass part sound when creating the BASIC Pattern, but later changed it to CELLO when creating the ENDING Pattern, then CELLO will be stored as the bass sound for all four of the pattern types.

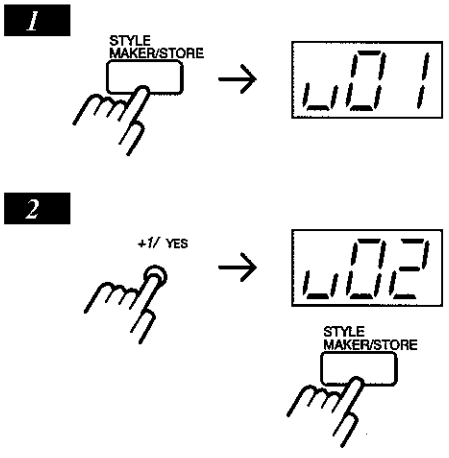
If you incorrectly enter one or more notes while creating any part of the auto accompaniment style, just press the **CLEAR** key for that part and all of the notes that you input will be erased. (For example, if you press the G#5 key while creating the bass part for a style, the entire bass line will disappear.)

You can use the **RHYTHM ERASE** key (A5) to remove individual drum sounds from a Rhythm part. For example, to remove only the "closed hi-hat" sound from a Rhythm part, hold down the A5 key and press the F#1 key which controls the closed hi-hat sound. That sound will be removed from the Rhythm part.

When using STYLE MAKER, always create styles in the key of C. Once your new Style is stored, the auto-accompaniment system of the X65-D will automatically modify the Style you create to suit any chord.

You cannot edit the Variation and FILL-IN 2 Patterns on the X65-D.

◆ Storing Your New Patterns

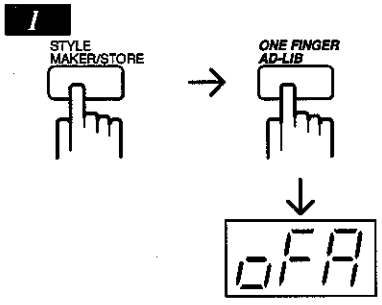


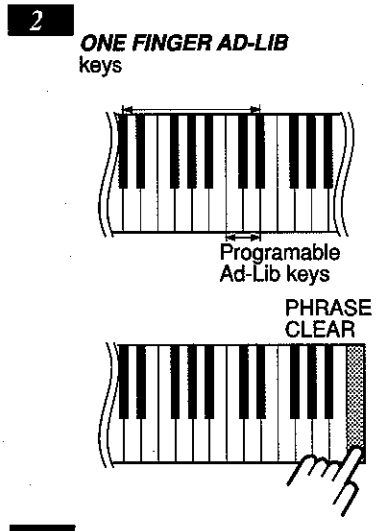
Now that you've created an entirely new Style, store it in the keyboard's User Memory using the following procedure:

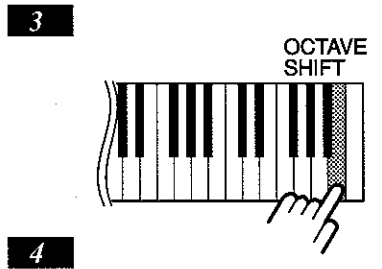
1. With your new Style in final form, press the **STYLE MAKER** button once again (we assume you haven't pressed it since the beginning of this Style Maker section). The display should change to read "U01".
   If you press the STYLE Maker Button one more time, the AUTO-ACCOMP. that was created will be stored in USER 1.
2. On the X65-D, it is possible to store up to two Styles which you have created. Those two Styles will be stored as Styles 099 and 100, which are listed as USER 1 and USER 2 in the "STYLE LIST." The "U01" in the display indicates that USER 1 is selected. You can use the **SELECTOR** buttons to change this number from "U01" to "U02". In this example, let's store our style in the USER 2 location. Use the **+1** button to change the display to "U02". Press the **STYLE MAKER** button one more time. The style you just created will be stored as Style 100 (USER 2).

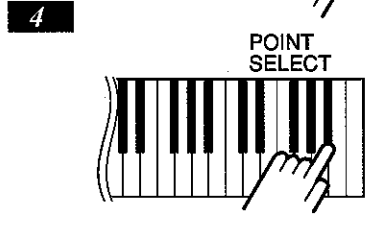
■ Programmable ONE FINGER AD-LIB:

◆ Creating Phrases





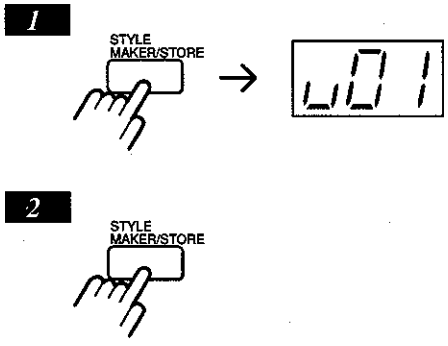




With the keyboard's programmable ONE FINGER AD-LIB capability, you have the power to create your own ONE FINGER AD-LIB phrases. Here's how:

1. Press the **STYLE MAKER** button. Then, press the **ONE FINGER AD-LIB** button. The letters "oFA" (which are short for "One Finger Ad-Lib") will appear in the display. The Ad-Lib phrase for the "F3" key will also begin to play. You can store your own phrases on four "programmable Ad-Lib keys" from F3 to G#3.
2. Select the phrase you want to modify by pressing the key for that phrase from among the four "programmable Ad-Lib keys" from F3 to G#3.
   The Ad-Lib phrase you've selected will begin to play. The sound number for that phrase will be shown in the display. When you're ready to erase the selected phrase, press the **PHRASE CLEAR** (C6). The phrase will disappear.
3. "Playing In" the New Phrase.
   Use the keys from C1 to A5 to play a new phrase. If you find that this range isn't high or low enough to play the Ad-Lib phrase you have in mind, press the **OCTAVE SHIFT** key (B5). This key can be used to shift the range played by the keys (from C1 to A5) up or down an octave. Pressing the **OCTAVE SHIFT** key one time causes the keyboard to shift up one octave. Pressing it a second time causes the keyboard to shift down one octave. Pressing it a third time restores the keyboard to the normal pitch.
   Now, use the SELECTOR buttons to select a sound for the phrase.
4. Entering Additional Ad-Lib Phrases:
   To enter a second Ad-Lib phrase, make sure that your first customized Ad-Lib phrase (from Step 3 above) is finished. Now, press the **POINT SELECT** key (A5).
   This tells the keyboard that you are done with the current phrase. Now, repeat Steps 2 and 3 above selecting a different phrase to modify. When you are done with this second phrase, press the **POINT SELECT** key again. You can continue this process until all four programmable Ad-Lib keys have been programmed with your own customized phrases.

◆ Storing ONE FINGER AD-LIB Phrases



Before storing your new Ad-Lib phrases, note that all Ad-Lib phrases must be stored with the Styles that accompany them. Therefore, you may want to make changes to the Style now before storing the new phrases.

You can change up to four ONE FINGER AD-LIB phrases for any given Style.
When you're finished changing the phrases, store them for future use using the procedure below:

1. Press the **STYLE MAKER** button. The display will change to read u01.
2. On the X65-D you can store up to 2 Styles and their accompanying ONE FINGER AD-LIB phrases. Those two sets of Styles and Phrases will be stored as Styles 099 and 100 which are listed as USER 1 and USER 2 in the "STYLE LIST".
   The "u01" in the display indicates that USER 1 has been selected (you could change the display to u02 by pressing **SELECTOR** button 2). For this example, let's store the Style and Phrases to USER 1. With u01 in the display, press the **STYLE MAKER** button one more time. The complete set of Style Patterns and new ONE FINGER AD-LIB Phrases will be stored as Style number 099 (USER 1). To verify storage, use the **ACCOMP. STYLE** and **SELECTOR** buttons to select Style 099 (USER 1). Make sure that the **ONE FINGER AD-LIB** button is in the "on" position. Press the **START/STOP** button. When you press the ONE FINGER AD-LIB key on which you created the new phrase, you should hear your newly created phrase.

The USER locations in the STYLE LIST are used for storing both Accompaniment Styles and the ONE FINGER AD-LIB phrases that you create. Therefore, if you had saved the Ad-Lib phrases created above as USER 2, the modified version of the POP ROCK Style (which you created and stored as USER 2 previously) would be erased, and the Style you selected to create the new Ad-Lib phrases would take its place. If you want to create ONE FINGER AD-LIB phrases to go with a Style of your own invention, then you should edit and store your new Style in advance on one of the USER memories. Then, select this USER Style when you are ready to create the Ad-Lib phrases.

⚠ *The X65-D automatically modifies the Ad-Lib phrases you create using the Programmable feature to suit any chord. When you hear your phrases after storing on a USER location, you may notice that they sound different from your original creation.*

■ Using the SYSTEM/MIDI Functions:

In this section, we will describe the keyboard's SYSTEM/MIDI functions which deal with the overall control of the keyboard. The SYSTEM/MIDI functions are assigned the following "function numbers":

1. MIDI MODE SELECTION
2. TUNING CONTROL (Pitch Adjustment)
3. TRANSPOSE (To Change Keys)
4. TOUCH TYPE SELECT: Allows you to select from two different touch settings.
5. PEDAL FUNCTION SELECT: Allows you to assign a function to the PEDAL jack.
6. TRANSMIT CHANNEL SELECT
7. LOCAL CONTROL ON/OFF
8. ACCOMPANIMENT MIDI OUT ON/OFF
9. DRUM SEND CONTROL
10. EXCLUSIVE SEND
11. WHEEL ASSIGN

◆ Navigating in SYSTEM/MIDI Mode

The X65-D uses either of two different methods to access SYSTEM/MIDI functions. Both are described below. PLEASE READ THE INFORMATION. IT WILL SAVE YOU TIME!

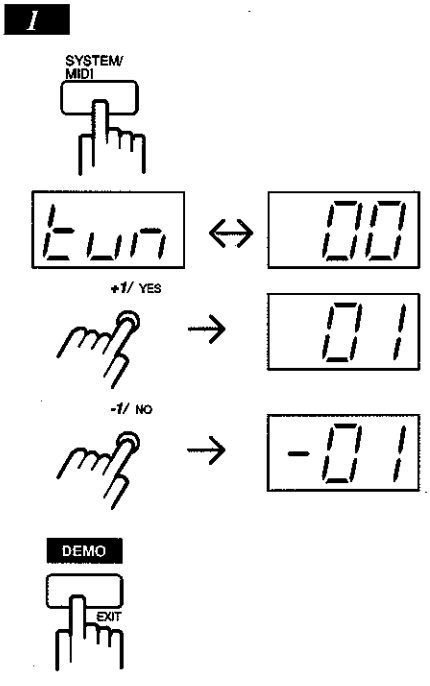
METHOD 1: Press the SYSTEM/MIDI button as many times as is necessary to reach your desired function. The function values and abbreviations will appear in the display.

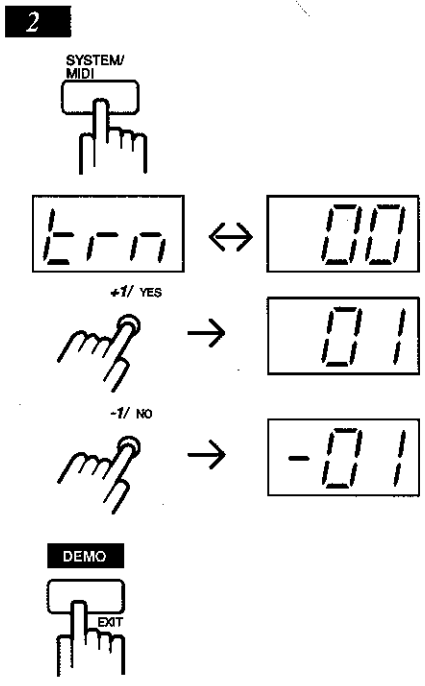
METHOD 2: Press the SYSTEM/MIDI button one time and use the SELECTOR buttons to directly enter the number of your desired SYSTEM/MIDI function (for example, if you want the TRANSPOSE function, you would press 3). See above for the list of SYSTEM/MIDI function numbers.

If you know the function number, Method 2 is faster. If you're unsure of the function number, Method 1 is better, since it scrolls through all the SYSTEM/MIDI functions in order. The following instructions all use Method 1.

1. **TUNING CONTROL**
   With the accompaniment stopped, press the **SYSTEM/MIDI** button twice (the button will not light).

   The display should begin to flash, alternately showing the letters "tun" (short for TUNE) and the number 00. If you press the **+1** button once, the number in the display will change to read 01 and the pitch will raise slightly.
   If you press the **−1** button instead, the number will change to −01 and the pitch will drop slightly. You can use the TUNE function to adjust the keyboard's pitch within a range of −08 to 07.
   Press the **DEMO** button (which will not light) to leave the SYSTEM/MIDI mode.





2. TRANSPOSE

With the accompaniment stopped, press the **SYSTEM/MIDI** button three times.

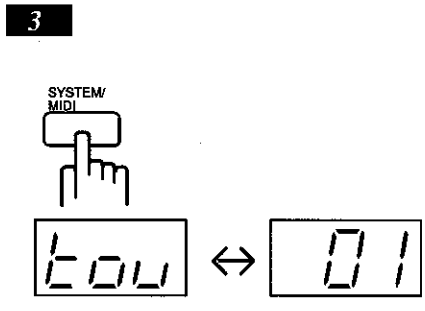
The display will begin to flash, alternately showing the letters "trn" (short for TRANSPOSE) and the number 00. If you press the **+1** button, the number in the display will change to read 01 and the pitch will raise by a half step.

If you press the **−1** button instead, the number in the display will change to −01 and the pitch will drop by a half step.

You can use the TRANSPOSE function to adjust the keyboard's pitch by one full octave upward or downward (that is, from −12 half steps to +12 half steps).

Press the **DEMO** button to leave the SYSTEM/MIDI mode.

⚠ *TRANSPOSE cannot be selected when the keyboard is being pressed.*



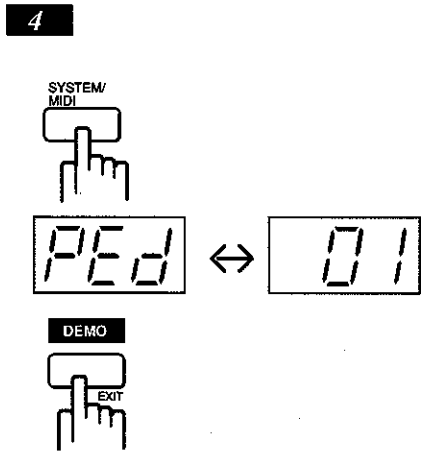
3. TOUCH TYPE SELECT

Your keyboard lets you select from two different "touch" settings which are numbered as follows:

01: Offers a NARROW dynamic range with less contrast between loud and soft playing.

02: For a WIDE dynamic range, providing greater contrast between loud and soft playing.

With the accompaniment stopped, press the **SYSTEM/MIDI** button four times (the button will not light). The display will alternate between "tou" and "01". The "tou" stands for "TOUCH TYPE" and "01" lets you know that the current touch setting is "01". Use the **+1/−1** buttons to select either of the above two touch settings. Press the **DEMO** button to leave the SYSTEM mode.



4. PEDAL FUNCTION SELECT:

Allows you to assign a function to the PEDAL jack. The function numbers are as follows:

01: Sustain pedal

02: Pedal functions like the SYNC./FILL-IN button on the front panel

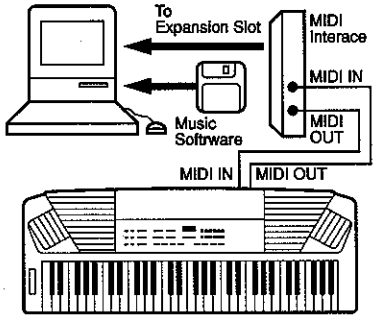
03: Pedal functions like the VARIATION button on the front panel

With the accompaniment stopped, press the **SYSTEM/MIDI** button five times (the button will not light). The display will alternate between "PEd" and "01" letting you know that the current PEDAL Function is 01 (SUSTAIN). If you connect the optional footswitch (model F-1, available separately) to the PEDAL jack, the footswitch will control the SUSTAIN function. Use the **+1/−1** buttons to select one of the other functions for the PEDAL jack. Press the **DEMO** button to leave the SYSTEM mode.

■ Using the MIDI Functions

This section will outline the X65-D's MIDI functions which allow you to connect the keyboard to other MIDI instruments. The General MIDI capability of the X65-D will offer you tremendous power and flexibility in a MIDI environment.

◆ Connecting the Keyboard to Other MIDI Instruments

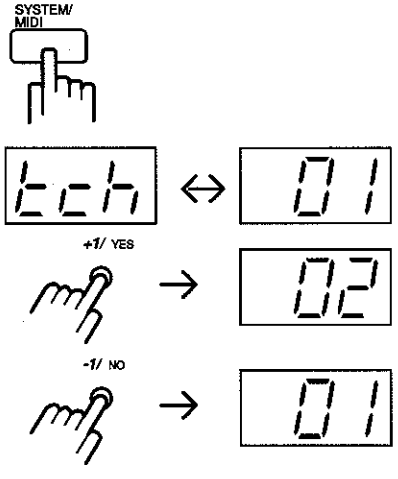


To transmit MIDI data from your keyboard to another MIDI instrument, purchase a MIDI cable and use it to connect the MIDI OUT jack of your X65-D to the MIDI IN jack of the other instrument. Make sure that the MIDI "transmit" channel on your X65-D matches the MIDI "receive" channel of the other instrument (the procedure for setting the Transmit channel is described in the next section).

To receive MIDI data from another MIDI instrument to your X65-D use the MIDI cable to connect the MIDI OUT jack of the other instrument to the MIDI IN jack of your X65-D. Make sure that the MIDI "receive" channel on your X65-D matches the MIDI "transmit" channel of the other instrument.

To connect your X65-D to a computer, purchase a MIDI Interface and make the connections as shown in the diagram at left.

◆ MIDI Transmit ("tch") Channel Select



Allows you to select the transmit channel for your keyboard. The abbreviation "tch" stands for "transmit channel".
With the accompaniment stopped, press the **SYSTEM/MIDI** button six times. The display should alternate between "tch" and "01". This means that the current MIDI Transmit channel is 1. Press the **+1** button to change the 01 to 02. This changes the keyboard's MIDI Transmit channel to channel 2. Now, use the **−1** to return to channel 1. Use this procedure to select any MIDI channel from 1 to 16. Press the **DEMO** button to leave the SYSTEM/MIDI mode.

When the "ACC" (described later) is set to "on", the "tch" will not apply. The preset "accompaniment send" channels will override the "tch" channel.

The Sound 1 and Sound 2 parts use a different MIDI transmit channel. If "tch" is set to 1, the Sound 1 will transmit on channel 1 Sound 2 is assigned to the "tch +1" channel. So if "tch=1", Sound 2 is assigned to MIDI channel 2. If tch=2, then Sound 1 will be assigned to MIDI channel 2 and Sound 2 will be assigned to MIDI channel 3.

◆ MIDI MODE SELECTION

The X65-D's MIDI implementation is the most powerful and flexible ever designed for a portable keyboard. You can select from two separate MIDI modes: General MIDI Standard mode and Pro Multi-Timbral mode.
In both MIDI modes, the X65-D offers features which meet or exceed the demanding General MIDI specification:

- 128 sounds arranged in General MIDI order;
- Internal drum/percussion sounds;
- 28-note polyphony (Eight notes of polyphony are reserved for the drum tracks with the remaining 20 notes used for all other instruments.)
- 16-channel multi-timbral capability

◆ Description of MIDI Modes

The two MIDI modes differ primarily in the way that they transmit and receive data via MIDI. The following descriptions will help you understand the differences.

◆ GENERAL MIDI STANDARD MODE

General MIDI Standard mode (which we'll call "GMStd mode") is used primarily to play back General MIDI song data through your X65-D. Here are the key features of "General MIDI Standard" mode:

- The keyboard will receive MIDI data on all 16 MIDI channels with channel 10 reserved as the drum track channel. Use the DRUM SET sound (129) to transmit drum sounds.
- Only the SELECTOR and SOUND 1/2 buttons will be active. No other buttons will function.
- You can transmit data on any MIDI channel, but only one channel at a time. The "tch select" function in SYSTEM/MIDI mode is used to select the transmit channel.
- You cannot send auto-accompaniment data via MIDI. Only the actual "played" notes will be transmitted.
- The 16-channel multi-timbral capability allows you to play General MIDI song data from external sequencers or computers.

The procedure for recording in General MIDI Standard mode is described later in this manual. However, you may find Pro Multi-Timbral mode (described below) to be easier to use in many MIDI recording situations.

◆ PRO MULTI-TIMBRAL MODE

Pro Multi-Timbral mode (which we'll refer to as "Pro" mode) is perhaps a more flexible mode for MIDI recording purposes. The key elements of "Pro" mode are:

- The keyboard will receive data on all 16 MIDI channels. Channels 10 – 14 are reserved for drum data. All other channels are "free" to receive any part.
- All buttons will operate in normal fashion.
- You can transmit auto-accompaniment data via MIDI on multiple MIDI channels simultaneously. To do this, the "Accompaniment MIDI Out" function must be on. The transmit channel assignments are as follows:

Part	Channel Assignment
Live Melody	Channels 1 and 2
Bass	Channels 3
Chord 1 (Group A)	Channel 4
Chord 1 (Group B)	Channel 5
Chord 2 (Group A)	Channel 6
Chord 2 (Group B)	Channel 7
Chord 3 (Group B)	Channel 8
Drums/Percussion	Bass Drum = Channel 10 Snare Drum = Channel 11 Other = Channels 12 and 14

When "Accompaniment MIDI Out" is off, the keyboard will transmit on only one channel ("tch") at a time and the MIDI recording procedure is identical to that described later for "GMStd" mode (above).

- Drum data can be sent in any of three ways:
  (1) When "Accompaniment MIDI Out" is off, use the DRUM SET sound (129) to transmit drums on the current "tch" channel.
  (2) When "Accompaniment MIDI Out" is on, use the auto-accompaniment function to send drum data on channels 10 through 14.
  (3) When "Accompaniment MIDI Out" is on, use the "Drum Transmit Channel Select" function in SYSTEM/MIDI mode to send the entire auto-accompaniment drum part on MIDI channel 10 only.

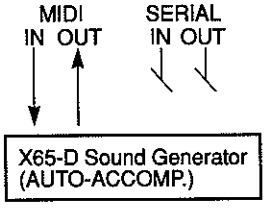
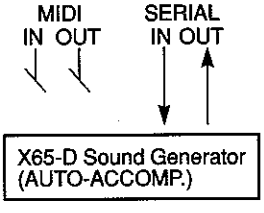
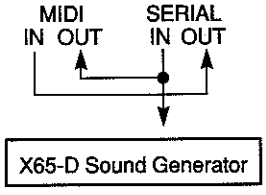
◆ SERIAL INTERFACE MODE

This mode is used for connecting the X65-D directly to a computer without using MIDI. The X65-D's rear panel serial interface can be connected to the computer directly with a serial cable. After connecting, use the serial interface switch to select the type of computer you are using:

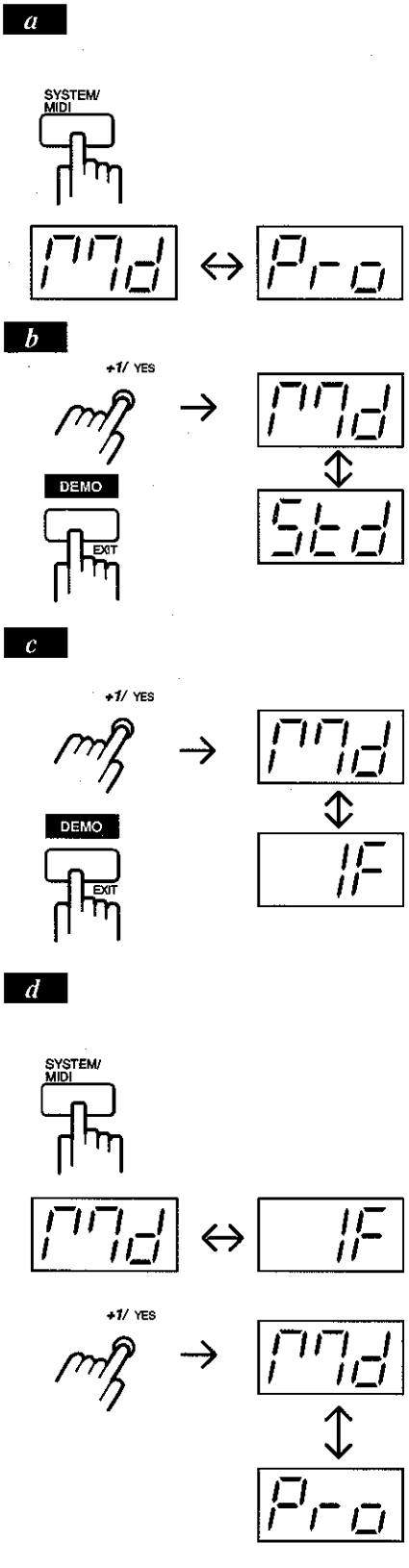
M For using MIDI IN/OUT jacks only. No Serial Interface
A When using an Apple Macintosh
I When using an IBM PC/AT series computer
N When using an NEC PC-9800 series computer

⚠ *A special serial cable is needed for each type of computer used. Consult your local computer dealer to obtain the proper serial cable.*

SIGNAL FLOW AND MODE SWITCHES

	The switch is set for MIDI	The switch is set for Apple, IBM, & NEC
PRO MULTI-TIMBRAL & GENERAL MIDI STANDARD		
SERIAL INTERFACE	Do not select this setting when using MIDI jacks. It may result in computer data errors.	

◆ Selecting MIDI Modes



To select Pro Multi-Timbral mode, use the following procedure:

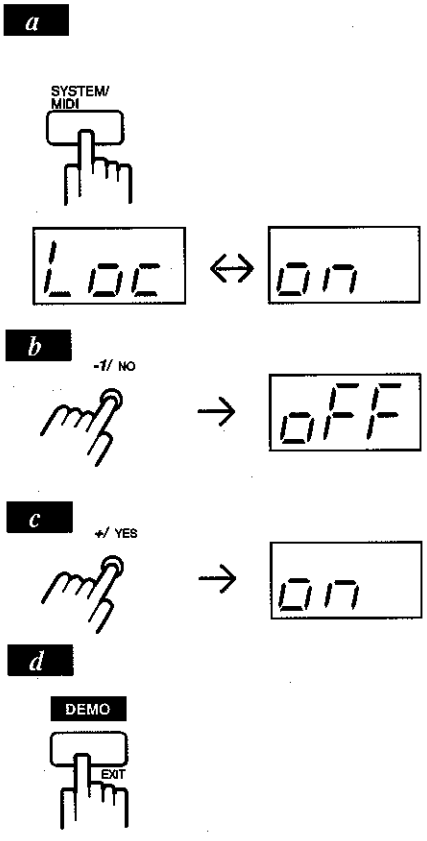
a) **PRO MULTI-TIMBRAL MODE**
With the accompaniment stopped, press the **SYSTEM/MIDI** button. The display should flash alternately between "Md" and "Pro". The "Md" represents "Md" which is short for "MIDI" and the "Pro" indicates that Pro Multi-Timbral mode is selected .

b) **GENERAL MIDI STANDARD MODE**
Next, try pressing the **+1** button. The display will change to flash alternately between "Md" and "Std". This indicates that the General MIDI Standard mode is selected. To leave the SYSTEM/MIDI mode, press the DEMO button.

c) **SERIAL INTERFACE MODE**
Next, press the **+1** button. The letters "Md" and "IF" will flash alternately in the display. This indicates that the Serial Interface Mode has been selected. In this mode, data can be sent and received via the Serial Interface in the same way that you would send MIDI data via the MIDI IN/OUT jacks in General MIDI Mode.

d) **RETURNING TO PRO MULTI-TIMBRAL MODE**
With the accompaniment stopped, press the SYSTEM/MIDI button. The display should flash alternately between "Md" and "IF". Press the **−1** button. The "IF" will change to "Pro" indicating that Pro Multi-Timbral mode is selected once again. To leave the SYSTEM/MIDI mode, press the **DEMO** button.

◆ Setting Local Control ON/OFF



Using Local Control, you can determine whether or not your keyboard produces sound when the keys are played. Why would you want to turn off the keyboard's sound? When using MIDI, your X65-D can operate as a "controller" used to control the sound of another MIDI-equipped keyboard. In this situation, you may want to play the keys on your X65-D but hear only the sound of the other keyboard (sometimes referred to as the "slave" keyboard) that is being controlled through MIDI.

When Local Control is "ON", you will hear the X65-D's sound when the keys are played. When Local Control is "OFF", MIDI note information is still sent via MIDI as you play, but no sound is heard through the keyboard's speakers.

To select Local ON/OFF, use the following procedure:

a) LOCAL CONTROL ON
With the accompaniment stopped, press the SYSTEM/MIDI button seven times.
The display should flash alternately between "Loc" and "on". The "Loc" stands for Local Control; and the "on" indicates that Local Control is set to "on".
In this setting, you will hear sound when you play the keys on your keyboard.

b) LOCAL CONTROL OFF
Next, press the **−1** button. The display will change to flash alternately between "Loc" and "OFF". This indicates that the Local Control is off and no sound will be heard when the keys are played. Remember, MIDI data is still being sent when you play the keys. So, if your keyboard is connected to another keyboard through MIDI (with the X65-D's MIDI OUT jack connected to the other keyboard's MIDI IN jack with a MIDI cable), you should hear notes sounding on the other keyboard as you play keys on your X65-D.

c) RETURNING TO LOCAL CONTROL ON
To turn Local Control "ON" once again, simply press the **+1** button. If your other keyboard is still connected via MIDI, you should hear both keyboards produce sound as you play keys on your X65-D.

d) LEAVING THE LOCAL CONTROL ON/OFF MODE
To leave the Local Control mode, press the **DEMO** button

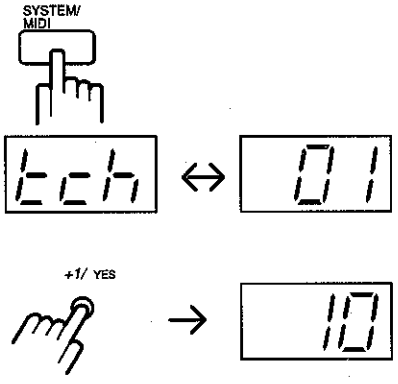
You cannot set Local Control "off" and Accompaniment MIDI OUT mode to "on" at the same time. This situation will be described later in this manual.

◆ Creating Songs With An External Sequencer

When using your keyboard's MIDI functions, you can create a song with 16 parts.
These 16 parts can all play together from the beginning of the song to the end, just as the melody you play by hand and the auto-accompaniment part can play together from the start of a song to its end. Here's how to start creating songs on your keyboard in the two MIDI modes using an external sequencer:

◆ Recording in General MIDI Standard Mode

5



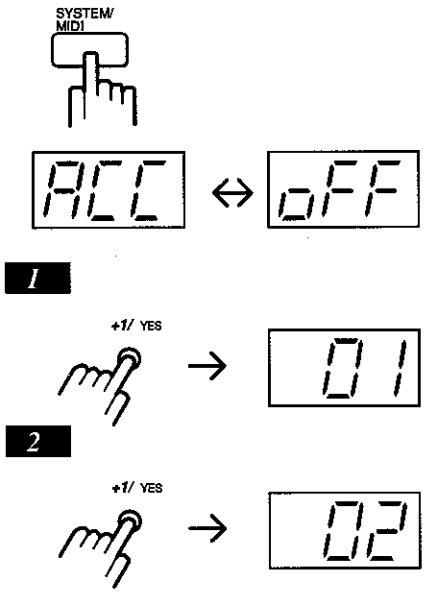
1. First, connect the X65-D to a sequencer (see the earlier section on connecting your keyboard to other MIDI devices).
2. Use the procedure described earlier to select General MIDI Standard mode.
3. Set LOCAL control to the "off" position.
4. Turn on the "Echo Thru" or "Thru" function in your sequencer.
5. Use the procedure described earlier to change the MIDI Transmit channel ("tch") to 10. This will allow you to record a drum part first.
   Be sure to press the DEMO button to exit SYSTEM/MIDI mode.
6. Check to be sure that the SOUND 1 button lamp is lit (if not, press it now).
   Then, select sound number 129 using the SELECTOR buttons. Start the sequencer recording and use the keys of your X65-D to record a drum part.
7. Now you're ready to create other parts. Change the Transmit channel from 10 to 1. The display should change to alternate between "tch" and "1". Be sure to press the DEMO button to leave the SYSTEM/MIDI mode.
8. When you press any key, the keyboard will play whatever sound is currently selected. Use the SELECTOR buttons to select the sound of your choice. Then, start the sequencer and record the next part. You should be able to hear the drums you recorded earlier as you play this new part.
9. To record other parts, use the same steps to change the MIDI Transmit channel to any channel from 2 through 16 (except channel 10 which you used for drums). Then, select the sound you will use for the new part and record it as before. Of course, if you change the sound you are using in the middle of the recording, the sound change will also be recorded. Therefore, it is not necessary to assign three solos – a sax solo, a guitar solo, and an organ solo to three separate channels. You can record them all on one channel by simply changing the sound as you record.
10. If your sequencer allows you to "channelize" or change the MIDI channel for any track after you've recorded it, you may be able to save time in recording.
    After recording the drums on channel 10, set the MIDI Transmit channel to 01. Record the next track on channel 1. After recording, change the channel on this track to channel 2. This frees channel 1 to record another track which you can then assign to channel 3. Keep transmitting data on channel 1 and then assigning the data to a different channel. This will help you to avoid having to change the MIDI Transmit channel before recording each new track.

◆ Recording in Pro Multi-timbral Mode

In General MIDI Standard mode, your X65-D cannot send (transmit) "automatic" information (auto-accompaniments, Duet and ONE FINGER AD-LIB) or recorder data via MIDI. In Pro Multi-Timbral mode, you can enable the keyboard to send this information. Before proceeding, please do the following:

1. Make sure LOCAL CONTROL is turned "on" (especially if you had turned it off for the previous example). Turn off the "Echo Thru" or "Thru" function in your sequencer.
2. Use the procedure described earlier to select Pro Multi-Timbral mode. The display should change to flash alternately between "Md" and "Pro".

◆ Accompaniment MIDI Out



The keyboard's ability to send "automatic" data via MIDI is controlled by a SYSTEM/MIDI function called "Accompaniment MIDI Out". This function must be "on" to allow automatic data to be sent via MIDI. Here is the procedure:

While the accompaniment is stopped, press the **SYSTEM/MIDI** button nine times. The display should flash alternately between "ACC" and "oFF". The "ACC" stands for "Accompaniment MIDI Out". The "oFF" signifies that the keyboard is not currently sending "automatic" information via MIDI.

1. Press the **+1** button. The display will show "01". When Accompaniment MIDI OUT is at 01, all the auto-accompaniment data will be transmitted.
2. Press the **+1** button again. This time the display will show "02". When Accompaniment MIDI Out is at 02, only auto-accompaniment note and pitch bend data will be sent. All other auto-accompaniment controller data will be suppressed. Try each mode to determine which one works best with your sequencer or particular MIDI application.

You cannot set the Accompaniment MIDI Out mode to "on" when Local Control is in the "off" mode.

When the "ACC" is set to "oFF", the keyboard will transmit data on only one MIDI channel. (referred to as "tch")

◆ Recording in "Pro" mode

With "Pro" mode selected and "Accompaniment MIDI Out" on, start the sequencer recording and begin to play using auto-accompaniment or One Finger Ad-Lib.
On playback, your performance should sound exactly the same as it did when you recorded it.

◆ Sending Recorder Data to an External Sequencer via MIDI

The songs stored in the Recorder of your X65-D can also be sent to an external sequencer via MIDI. This is an extremely powerful feature, allowing your keyboard to operate as a "workstation". You can record songs on your X65-D anywhere and then transfer the song data to your external sequencer later. To send Recorder data via MIDI, connect the MIDI jacks of your X65-D to the MIDI jacks of your external sequencer (as shown earlier in this manual). Make sure that the "Accompaniment MIDI Out" function is "on" as described above. Then, press the PLAY/STOP button on the Recorder. As your song plays, the note data will be sent via MIDI.

When X45/55/65-D Auto-Accompaniment data is sent to an external sequencer (via MIDI), the processing capacity of the sequencer may be exceeded (depending on the sequencer specifications) and the data storage may be slow. This is because the X45/55/65-D sends large amounts of data at one time. If slowness occurs, set the tempo on the X45/55/65-D to "SyC" (refer to page B-8) and set the tempo of the sequencer at a slightly slower rate before transmitting MIDI data.

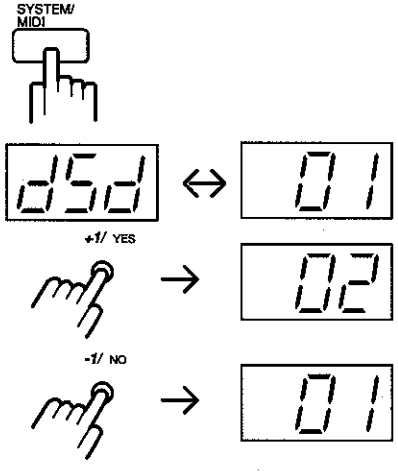
◆ MIDI Channel Assignments in "Pro" mode

In "Pro" mode, the keyboard will receive data on all 16 MIDI channels. Channels 10 – 14 are reserved for drum data. All other channels are "free" to receive any part.
When the "ACC" is set to "on", the keyboard will transmits data on several MIDI channels. The channel assignments are:

SOUND 1 ..... Channel 1
SOUND 2 ..... Channel 2
BASS ..... Channel 3
CHORDS ..... Channels 4 through 8
RHYTHM (Drums) ..... Channels 10 through 14

The first track of the overdubbing recorder uses the same channels as above. The channel assignments of the subsequent overdub tracks are:
Second track = Channel 2, Third track= Channel 15, Fourth track = 16
Fifth track = Channel 9

◆ Drum Send Control



As shown above, when the "ACC" is set to "on", the drum parts will be transmitted via MIDI channels 10 through 14. You can set the keyboard to send all drum data via MIDI channel 10 only using the following procedure:

1. With the accompaniment stopped, press the **SYSTEM/MIDI** button nine times.
   The display should flash alternately between "dSd" and "01". The "dSd" stands for "Drum Send" and the "01" indicates that the drum part is being sent on MIDI channels 10 through 14. Use the +1 button to change the number in the display to read 02. Now, the entire drum part will be sent on MIDI channel 10. When you use the −1 button to change the number in the display back to "01", the drum part will be sent on MIDI channels 10 through 14 as before.
   Press the **DEMO** button to leave the SYSTEM/MIDI mode.

◆ Drum Receive

When program changes are received externally via MIDI on channel 10, to which the drum part is assigned, the drum part change according to the table shown below.

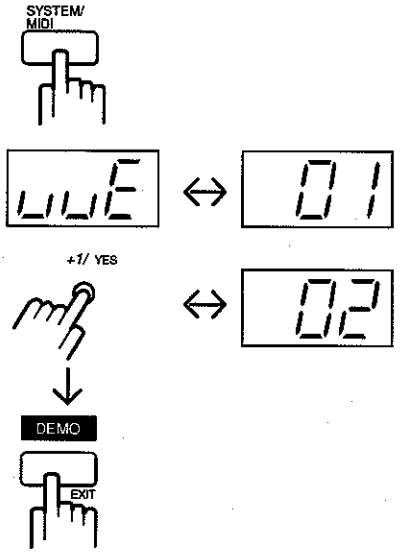
- DR1 STANDARD
- DR2 BOB
- DR3 JAZZ
- ORCHESTRA

Note: The numbers from 43 are repeated in same arrangement as 36–42 until 129.

Kit	DR1	DR1	DR1	DR1	DR2	DR3	DR4
Program No.	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	32	...	...	...
	33	...	...	...	...	34	35
	36	37	38	39	40	41	42
	.	.	.	.	.	.	.
	.	.	.	.	.	.	.
	.	.	.	.	.	.	.

◆ Wheel Assign Function

2



The X65-D's Control Wheel can be assigned to control any one of nine MIDI messages. Note that all these messages (except for the Pitch Bend) are transmitted as MIDI control change data only when the Local Control of the X65-D is turned "off".
Here is a summary of the MIDI control messages which can be sent and the way the control wheel should be used to send each type of message. The description "Move Wheel Up" means to rotate the wheel away from you (above the normal center position). "Move Wheel Down" means to rotate the wheel towards you (below the normal center position):

	MIDI message	Move Wheel Up (away from you)	Move Wheel Down (towards you)
01.	Pitch Bend (default)	Pitch bends up	Pitch bends down
02.	Aftertouch	Sends values 1 – 127	No data sent
03.	Volume	No data sent	Sends values 1 – 127*
04.	Expression	No data sent	Sends values 1 – 127*
05.	Panpot	Increases right side volume	Increases left side volume
06.	Modulation	Sends values 1 – 127	No data sent
07.	Data Entry	Sends values 1 – 127	No data sent
08.	External Effect Depth	Sends values 1 – 127	No data sent
09.	Chorus Depth	Sends values 1 – 127	No data sent

For VOLUME and EXPRESSION messages, the data value of "0" will be sent at the maximum down position. The highest value of "127" will be sent at the normal center position of the wheel.

The X65-D's Control Wheel is automatically set to control Pitch Bend when shipped from the factory. To change the wheel's control function, do the following:

1. Turn the Local Control Mode "off" (refer to "Setting the Local Control On/Off" section of this manual for the procedure).
2. Press the **SYSTEM/MIDI** button 11 times or until the display flashes alternately between "wE" and "01". The "wE" represents "we" which is short for "wheel". The 01 signifies that the current Wheel function is Pitch Bend.
   Use the **+1/−1** buttons to choose one of the other types of functions for the Control Wheel. If you select the "05" (Panpot), turning the wheel upward (away from you) will send a message to strengthen the right side volume, while the moving the wheel toward you will send a message to strengthen the left side volume. Press the **DEMO** button to leave the SYSTEM mode.

◆ Creating Accompaniment Styles

Suppose you want to create a complete Accompaniment Style on an external sequencer (such as KAWAI's professional MIDI sequencer, the Q-80EX) and store it in the keyboard's User Memory for use with the auto-accompaniment feature. Here's how it can be done:

■ Recording Auto-Accompaniment Styles Created with an External Sequencer for Use with the X65-D

1. First, program the Accompaniment Style into your external sequencer.
2. Next, make sure that the external sequencer's MIDI Transmit channels match the Rhythm, Chords and Bass channels of your X65-D.
3. Use the **TEMPO DOWN** button to change the display until it reads SYC (short for "SYNC").
4. Prepare your keyboard to record the Style into User Memory. Record the Group B Rhythm part first. Begin by pressing the STYLE MAKER button just as you did when you created a Style with the Style Maker feature. Then, select which of the four pattern types (BASIC, INTRO, FILL-IN, or ENDING) you are going to record from the sequencer. Finally, select the Group B Rhythm part by pressing the G#5 key twice. Now the keyboard is set to record the Style from the external sequencer. When you start the Style from the external sequencer, the X65-D will begin recording that part automatically in "SYNC" with the sequencer.
5. Record the other parts one-at-a-time, making sure that the MIDI Transmit channels are matched with the appropriate channels on your keyboard. Repeat Steps 4 above to prepare the keyboard for recording. Select the appropriate pattern type, and start your external sequencer.
6. Once the complete Style has been recorded, you're ready to store the Style in the keyboard's User Memory.
7. Store your new Style using the STYLE MAKER button (as described on Page A-7 of this manual).

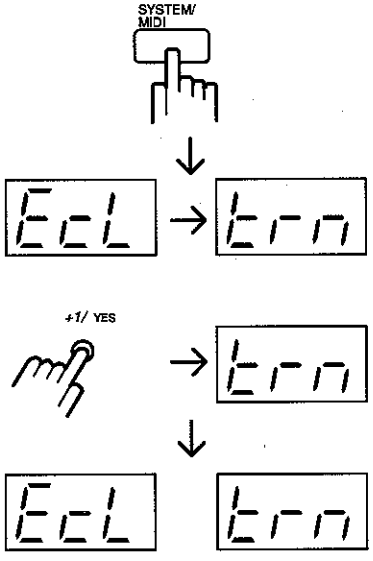
◆ Creating ONE FINGER AD-LIB Phrases

You can also use the same procedure just described to create ONE FINGER AD-LIB phrases on an external sequencer and store them in the keyboard's user memory.

■ Recording ONE FINGER AD-LIB Phrases Created with a Sequencer for Use with the X65-D

1. First, program a ONE FINGER AD-LIB phrase into your external sequencer.
2. Prepare the Keyboard to Record:
   - Use the **ACCOMP. STYLE** and **SELECTOR** buttons to select the Style you want as background for your ONE FINGER AD-LIB phrases.
   - Make sure that the MIDI Transmit channel of your sequencer matches the keyboard's MIDI Receive channel for SOUND 1 (that is, channel 1).
   - Press the **STYLE MAKER** button just as you did when you created ONE FINGER AD-LIB phrases earlier in this manual.
   - Press the One Finger Ad-Lib key on which you want to store the new phrase.
3. Record the Phrase
   Use the **TEMPO DOWN** button to change the display so that it reads "SyC" (which is short for "SYNC"). Now, when you start playing the phrase from the sequencer, it will be recorded as the ONE FINGER AD-LIB phrase for the ONE FINGER AD-LIB key that is currently selected.
4. By selecting different ONE FINGER AD-LIB keys, you can record up to four different phrases from the external sequencer. When you are through recording new phrases, use the "storing" procedure (see page A-9) to store the new Ad-Lib phrases in User Memory along with the corresponding Style.

◆ Sending Auto-Accompaniment Data and ONE FINGER AD-LIB Data to an External Sequencer



As you know, it is possible to store the Styles you create yourself in keyboard's User Memory. However, the number of Styles you can store is limited to two. To increase your library of Styles, the X65-D allows you to store your Styles and ONE FINGER AD-LIB phrases as "MIDI System Exclusive Data" in an external sequencer (such as the Kawai Q-80, a data filer, or some other external MIDI device) using the "data dump" function.

With the accompaniment stopped, press the **SYSTEM/MIDI** button 11 times. The display will change to alternate between "ECL" (short for Exclusive) and "trn" (short for "transmit"). Press the **+1** button to send the data. The display will read "trn" for a few moments, then change to alternate between "ECL" and "trn". Your data transmission is now complete.

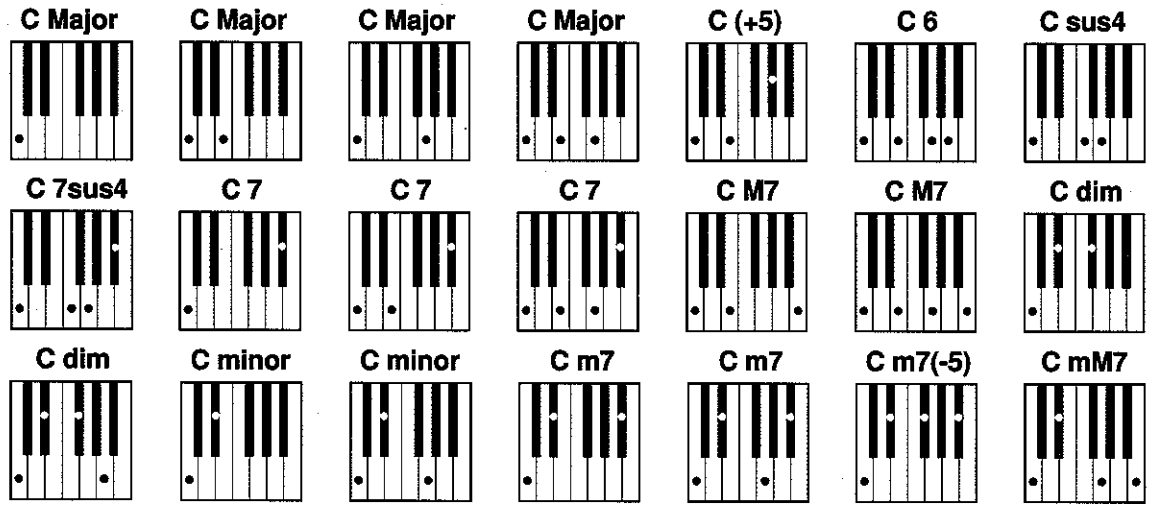
◆ Sending Stored Data Back to the Keyboard from an External Sequencer:

No special command is necessary to perform a data dump into the X65-D. Simply command your external sequencer to transmit data to the keyboard while the auto-accompaniment and recorder on the keyboard are both turned off. The keyboard will receive this data automatically.

These are a few examples of the ways in which the keyboard's MIDI functions can be used. There are certainly many other interesting and enjoyable things you can find to do with MIDI. Its possibilities are limitless!

Chord Table

The following are chord "forms" which can be recognized by your X65-D. They are called "forms" because they can be easily transposed into any key by following the same basic formula in each key. The chord forms below are all in the key of C:

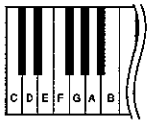


◆ Transposing Chord Forms into Other Keys

The following steps will help you to transpose the above chord forms into other keys.

(1) LEARN THE NOTE NAMES

First, make sure you know all the names on your keyboard.
The illustration below shows you the note names:



(2) ROOT NAMES

Take a good look at the chord forms above in the key of C. Notice that one particular note appears in every chord. That is the "root" note C. This leads us to RULE 1 in using auto-accompaniments:

"EVERY CHORD FORM MUST CONTAIN THE ROOT NOTE."

When you're in the key of C, every chord form you play must contain the root note C. In the key of F, every chord form must contain an F. And so on.

(3) WHAT IS AN INTERVAL

Look closely at the "C Major" chord form that has three notes (C-E-G) marked with dots. Note the spacing between the C and the E. Starting with the first note above C (meaning C#), count the number of notes it takes to reach the next note in the chord form, (E). When you include all black and white keys, the E is exactly four notes above the root C. This spacing is called the "interval" between C and E. Now, count the interval between E and G. Your count should show that G is exactly three notes above E. So, for a three-note "C Major" chord form, start with the root note (C). Then, count up four notes to E and another three notes to G. These intervals (which make up a "formula") will always give you a "C Major" chord.

(4) TRANSPOSING CHORD FORMS

In any key, these chord form intervals will be the same. For example, to play a three-note "F-Major" chord form, start by holding down the root note "F". Now, use the same "formula" you used above.
Count four notes up to A. Then count up another three notes to C. The complete "F-Major" chord is F-A-C. These are exactly the same intervals that formed the "C-Major" chord above. RULE 2 follows from this example:

"CHORD FORMS CONTAIN THE SAME INTERVALS IN ANY KEY."

Every chord form in the chart above can be transposed into a different key by determining the intervals between notes and counting upward (or downward if it's easier) from the root note to match those intervals in the new key.
Essentially, you just learn the "formula" and apply it to each new key.

◆ Helpful Hints for Beginners

As you've studied the chord forms above, you've probably noticed that there is often more than one way shown to play the same chord. For instance, there are three different ways to play a "C-Major" chord (using 1, 2, or 3 notes). This has been done to accommodate different playing styles and make the X65-D flexible for all levels of musical ability. But if you're a brand new beginner, the discussion of chord forms and intervals may be confusing. The quick hints below will show you the EASIEST way to play the basic chords:

(1) BASIC CHORD TYPES

There are several basic chord types that appear in most music. Below is a list of these chords and the way they would appear as chord symbols in the key of C:

MAJOR:	C, C Major, C Maj
MAJOR SEVENTH:	C Major7, C Maj7, CM7
MINOR:	Cm, C minor, Cmin
MINOR SEVENTH:	Cm7, C minor 7, Cmin7
DOMINANT SEVENTH:	C7

(2) QUICK CHORD FORMULAS

To play any chord, first identify the "root" note. If the chord is "Fm7", the root note is "F". Now use these simple formulas to play chords:

MAJOR CHORDS:
Play the root note only. If the chord is "G-Major", just play "G".

MAJOR SEVENTH:
Play the root note plus one note below the root. If the chord is "D Maj7", play the root note D plus the "Csharp" just below it. For "F Maj7", play the root note F plus the E below it.

MINOR CHORDS:
Play the root note plus the third note above the root. Make sure you count black and white keys. For "Dmin", play the root note D plus the third note above, which is F. For "Gmin", play G and Bflat.

MINOR SEVENTH:
This one gets tricky. Play the root note, plus the third note above the root and the second note below the root. For "Dm7", play the root note D, the third note above (F) and the second note below the root (C). If this is too difficult, just use the MINOR CHORD formula shown above.

DOMINANT SEVENTH:
Play the root note plus the second note below the root. For "G7", play the root note G and the second note below it (F). For "C7", play C and B-flat.

Kawai hopes these quick formulas will help you to get started. But we hope you won't stop here. We encourage you to study the wide range of chord forms that your X65-D will recognize and learn to play them in all keys.
You'll find that the more time you invest in learning chords, the more musical enjoyment you'll receive from your keyboard.

Enjoy the "adventure" of learning music! And thank you for choosing Kawai!

■ Specifications

X65-D

KEYBOARD:	61 keys, Full-Size (Velocity Sensitive)
SOUNDS:	128 + 4 Drum Sets
ACCOMPANIMENT STYLES:	100 Styles + 98 Variations
POLYPHONY:	Maximum 28 Notes
EFFECTS:	Stereo Chorus, Split, Duet, Touch Response On/Off, Digital Reverb, Pitch Bend Wheel, 4 Drum Pads
ACCOMPANIMENT CONTROLS:	Start/Stop, Intro/Ending, Sync./ Fill-In, Tempo, Variation
RECORDER:	Rec/End, Play/Stop, Overdubbing Function
PROGRAMMING:	Style Maker, ONE FINGER AD-LIB Phrases
VOLUME CONTROLS:	Master Volume, Accomp. Volume
Volume PART ON/OFF:	One Finger Ad-Lib, Bass/ Rhythm/Chords
MISCELLANEOUS CONTROLS:	Demo, Super 3D, Wheel Assign
SPEAKERS:	12 cm × 2, 8 cm × 2
RATED VOLTAGE:	10 Volts DC. Works with six size C dry cell batteries or power adaptor (PS 102 or PS 101)
ACCESSORY JACKS:	MIDI In/Out, Pedal, Output 1, Output 2, DC In (10 v), Stereo Phones, Serial Interface
ACCESSORIES:	Music rack

DRUM SET 1 (DEFAULT)

Tastennr.	Taste	Tastennr.	Taste
34 (Bb)	*APPLAUSE	91 G	BOB LOW CONGA
35 (B)	*ACOUSTIC BASS DRUM	92 Ab	CONCERT CYMBAL
36 C	BASS DRUM 1	93 A	GATED SNARE DRUM
37 C#	SIDE STICK	94 Bb	C. HIGH-HAT (HIGH)
38 D	ACOUSTIC SNARE	95 B	A. SNARE (HIGH)
39 Eb	HAND CLAP	96 C	E. SNARE (HIGH)
40 E	ELECTRONIC SNARE	97 (C#)	*A. SNARE (SUB)
41 F	LOW FLOOR TOM	98 (D)	*E. SNARE (SUB)
42 F#	CLOSED HIGH-HAT	99 (Eb)	*PEDAL HIGH-HAT (HIGH)
43 G	HIGH FLOOR TOM	100 (E)	*RIDE CYMBAL 1 (HIGH)
44 Ab	PEDAL HIGH-HAT	101 (F)	*RIDE BELL (HIGH)
45 A	LOW TOM	102 (F#)	*TAMBOURINE (HIGH)
46 Bb	OPEN HIGH-HAT	103 (G)	*COWBELL (HIGH)
47 B	LOW MID TOM	104 (Ab)	*RIDE CYMBAL 2 (HIGH)
48 C	HIGH MID TOM	105 (A)	*HIGH TIMBALE (HIGH)
49 C#	CRASH CYMBAL 1	106 (Bb)	*HIGH TIMBALE (LOW)
50 D	HIGH TOM	107 (B)	*CABASSA (HIGH)
51 Eb	RIDE CYMBAL 1	108 (C)	*MARACAS (HIGH)
52 E	CHINESE CYMBAL	109 (C#)	*BOB CLOSE HIGH HAT (HIGH)
53 F	RIDE BELL	110 (D)	*BOB SNARE DRUM (HIGH)
54 F#	TAMBOURINE	111 (Eb)	*BOB SNARE DRUM (SUB)
55 G	SPLASH CYMBAL	112 (E)	*BOB COWBELL (HIGH)
56 Ab	COWBELL	113 (F)	*GATED SNARE DRUM (HIGH)
57 A	CRASH CYMBAL 2	114 (F#)	*GATED SNARE DRUM (SUB)
58 Bb	VIBRASLAP	115 (G)	*TIMPANI F
59 B	RIDE CYMBAL 2	116 (Ab)	*TIMPANI F#
60 C	HIGH BONGO	117 (A)	*TIMPANI G
61 C#	LOW BONGO	118 (Bb)	*TIMPANI Ab
62 D	MUTE HIGH CONGA	119 (B)	*TIMPANI A
63 Eb	OPEN HIGH CONGA	120 (C)	*TIMPANI Bb
64 E	LOW CONGA	121 (C#)	*TIMPANI B
65 F	HIGH TIMBAL	122 (D)	*TIMPANI C
66 F#	LOW TIMBAL	123 (Eb)	*TIMPANI C#
67 G	HIGH AGOGO	124 (F)	*TIMPANI D
68 Ab	LOW AGOGO	125 (F#)	*TIMPANI Eb
69 A	CABASA	126 (G)	*TIMPANI E
70 Bb	MARACAS	127 (Ab)	*TIMPANI F
71 B	SHORT WHISTLE		
72 C	LONG WHISTLE		
73 C#	SHORT GUIRO		
74 D	LONG GUIRO		
75 Eb	CLAVES		
76 E	HIGH WOOD BLOCK		
77 F	LOW WOOD BLOCK		
78 F#	MUTE CUICA		
79 G	OPEN CUICA		
80 Ab	MUTE TRIANGLE		
81 A	OPEN TRIANGLE		
82 Bb	BRUSH SHORT		
83 B	BRUSH LONG		
84 C	BOB BASS DRUM		
85 C#	BOB CLOSED HIGH-HAT		
86 D	BOB SNARE DRUM		
87 Eb	BOB OPEN HIGH-HAT		
88 E	BOB COWBELL		
89 F	BOB HIGH CONGA		
90 F#	BOB MID CONGA		

KEY NO.	DRUM SET 2*	DRUM SET 3*	DRUM SET 4*
34 Bb	APPLAUSE	APPLAUSE	APPLAUSE
35 B	ACOUSTIC BASS DRUM	ACOUSTIC BASS DRUM	ACOUSTIC BASS DRUM
36 C	BOB BASS DRUM	BASS DRUM 1	BASS DRAM 1
37 C#	SIDE STICK	SIDE STICK	SIDE STICK
38 D	BOB SNARE DRUM	BRUSH SHORT	ACOUSTIC SNARE
39 Eb	HAND CLAP	BRUSH SHORT	CLAVES
40 E	ELECTRONIC SNARE	BRUSH LONG	ACOUSTIC SNARE
41 F	LOW FLOOR TOM	LOW FLOOR TOM	TIMPANI F
42 F#	BOB CLOSED HIGH-HAT	CLOSED HIGH-HAT	TIMPANI F#
43 G	HIGH FLOOR TOM	HIGH FLOOR TOM	TIMPANI G
44 Ab	BOB CLOSED HIGH-HAT	PEDAL HIGH-HAT	TIMPANI Ab
45 A	LOW TOM	LOW TOM	TIMPANI A
46 Bb	BOB OPEN HIGH-HAT	OPEN HIGH-HAT	TIMPANI Bb
47 B	LOW MID TOM	LOW MID TOM	TIMPANI B
48 C	HIGH MID TOM	HIGH MID TOM	TIMPANI C
49 C#	CRASH CYMBAL 1	CRASH CYMBAL 1	TIMPANI C#
50 D	HIGH TOM	HIGH TOM	TIMPANI D
51 Eb	RIDE CYMBAL 1	RIDE CYMBAL 1	TIMPANI Eb
52 E	CHINESE CYMBAL	CHINESE CYMBAL	TIMPANI E
53 F	RIDE BELL	RIDE BELL	TIMPANI F
54 F#	TAMBOURINE	TAMBOURINE	TAMBOURINE
55 G	SPLASH CYMBAL	SPLASH CYMBAL	SPLASH CYMBAL
56 Ab	BOB COWBELL	COWBELL	COWBELL
57 A	CRASH CYMBAL 2	CRASH CYMBAL 2	CONCERT CYMBAL
58 Bb	VIBRASLAP	VIBRASLAP	VIBRASLAP
59 B	RIDE CYMBAL 2	RIDE CYMBAL 2	CONCERT CYMBAL
60 C	HIGH BONGO	HIGH BONGO	HIGH BONGO
61 C#	LOW BONGO	LOW BONGO	LOW BONGO
62 D	BOB HIGH CONGA	MUTE HIGH CONGA	MUTE HIGH CONGA
63 Eb	BOB MID CONGA	OPEN HIGH CONGA	OPEN HIGH CONGA
64 E	BOB LOW CONGA	LOW CONGA	LOW CONGA
65 F	HIGH TIMBAL	HIGH TIMBAL	HIGH TIMBAL
66 F#	LOW TIMBAL	LOW TIMBAL	LOW TIMBAL
67 G	HIGH AGOGO	HIGH AGOGO	HIGH AGOGO
68 Ab	LOW AGOGO	LOW AGOGO	LOW AGOGO
69 A	CABASA	CABASA	CABASA
70 Bb	MARACAS	MARACAS	MARACAS
71 B	SHORT WHISTLE	SHORT WHISTLE	SHORT WHISTLE
72 C	LONG WHISTLE	LONG WHISTLE	LONG WHISTLE
73 C#	SHORT GUIRO	SHORT GUIRO	SHORT GUIRO
74 D	LONG GUIRO	LONG GUIRO	LONG GUIRO
75 Eb	CLAVES	CLAVES	CLAVES
76 E	HIGH WOOD BLOCK	HIGH WOOD BLOCK	HIGH WOOD BLOCK
77 F	LOW WOOD BLOCK	LOW WOOD BLOCK	LOW WOOD BLOCK
78 F#	MUTE CUICA	MUTE CUICA	MUTE CUICA
79 G	OPEN CUICA	OPEN CUICA	OPEN CUICA
80 Ab	MUTE TRIANGLE	MUTE TRIANGLE	MUTE TRIANGLE
81 A	OPEN TRIANGLE	OPEN TRIANGLE	OPEN TRIANGLE
82 Bb	BRUSH SHORT	BRUSH SHORT	BRUSH SHORT
83 B	BRUSH LONG	BRUSH LONG	BRUSH LONG
84 C	BOB BASS DRUM	BOB BASS DRUM	BOB BASS DRUM
85 C#	BOB CLOSED HIGH-HAT	BOB CLOSED HIGH-HAT	BOB CLOSED HIGH-HAT
86 D	BOB SNARE DRUM	BOB SNARE DRUM	BOB SNARE DRUM
87 Eb	BOB OPEN HIGH-HAT	BOB OPEN HIGH-HAT	BOB OPEN HIGH-HAT
88 E	METRONOME CLICK	METRONOME CLICK	APPLAUSE

X65-D MIDI IMPLEMENTAION CHART
GENERAL MIDI STANDARD MODE

Date: 1994 June
Version: 001

Function...		TRANSMITTED	RECEIVE	REMARKS
Basic Channel	Default	1	1 – 16	
	Changed	1 – 16		
Mode	Default	X	Mode 3	
	Message	X	X	
	Altered	******		
Note Number		O	0 – 127	
	True Voice	24 – 108	0 – 127	
Velocity	Note On	0 – 127	O	
	Note Off	9n00	X	
After Touch	Key's	X	X	
	Ch's	X	X	
Pitch Bend		O	*O	Except Channel 10
Control Change	1	O	O	Modulation *1)
	6	O	O	Data entry
	7	O	O	Volume
	10	O	O	Panpot *1)
	11	O	O	Expression
	64	O	O	Hold *1)
	91	O	X	Effect depth
	93	O	X	Stereo Chorus
	98,99	X	O	NRPN LSB,MSB *2)
	100,101	X	O	RPN LSB, MSB *1), *3)
	120	X	O	All sounds off
	121	X	O	Reset all controllers
Prog Change		O	O	Except 10ch.
	True #	0 – 127	0 – 127	
System Exclusive		X	X	
Common	: Song Pos	******	******	
	: Song Sel	******	******	
	: Tune	******	******	
System Realtime	: Clock	******	******	
	: Command	******	******	
Aux Messages	: Local	******	******	
	: All note off	******	O	
	: Active sense	O	O	
	: Reset	******	******	

NOTES: 1) Except 10 ch.
2) NRPN – #0=Speaker Select
#1=Drums Panpot Select
3) RPN – #0=Pitch Bender Sensitivity
#1=Master Fine Tuning
#2=Master Coarse Tuning. Values are given by Data Entry

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
Mode 3: ONMI OFF, POLY
Mode 4: OMNI OFF, MONO

O : YES
X : NO

X65-D MIDI IMPLEMENTAION CHART
PRO MULTI-TIMBRAL MODE

Date: 1994 June
Version: 001

Function...		TRANSMITTED	RECEIVE	REMARKS
Basic Channel	Default	1	1 – 16	
	Changed	1 – 16		
Mode	Default	X	Mode 3	
	Message	X	X	
	Altered	******	******	
Note Number		0	0 – 127	24 – 108 keyboard
	True Voice	0 – 127	0 – 127	0 – 127 ACC, SEND
Velocity	Note On	0 – 127	O	
	Note Off	9n00	X	
After Touch	Key's	X	X	
	Ch's	O	O	
Pitch Bend		O	*O	* Except Channel 10 – 14
Control Change	1	O	O	Modulation *3)
	6	O	O	Data entry
	7	O	O	Volume
	10	O	O	Panpot *3)
	11	O	O	Expression
	64	O	O	Hold *3)
	91	O	X	Effect Depth
	93	O	X	Chorus
	98,99	X	O	NRPN LSB, MSB *4)
	100,101	X	O	RPN LSB, MSB *5) *3)
	120	X	O	All sounds off
	121	X	O	Reset all controllers
Prog Change		O	O	Except 10 – 14ch.
	True #	0 – 127	0 – 127	
System Exclusive		O	O	
Common	: Song Pos	******	******	
	: Song Sel	******	******	
	: Tune	******	******	
System Realtime	: Clock	O *1)	O *2)	
	: Command	Start, Stop	Start, Stop *6)	
Aux Messages	: Local	******	******	
	: All note off	******	O	
	: Active sense	O	O	
	: Reset	******	******	

NOTES: 1) When the RHYTHM is running
2) When it is SYNC.RECORDING through MIDI.
3) Except 10 – 14 ch.
4) NRRN – #0=Speaker Select
5) RPN #0=Pitch Sender Sensitivity

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
Mode 3: OMNI OFF, POLY
Mode 4: OMNI OFF, MONO

O : YES
X : NO

KAWAI

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